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GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY(U)

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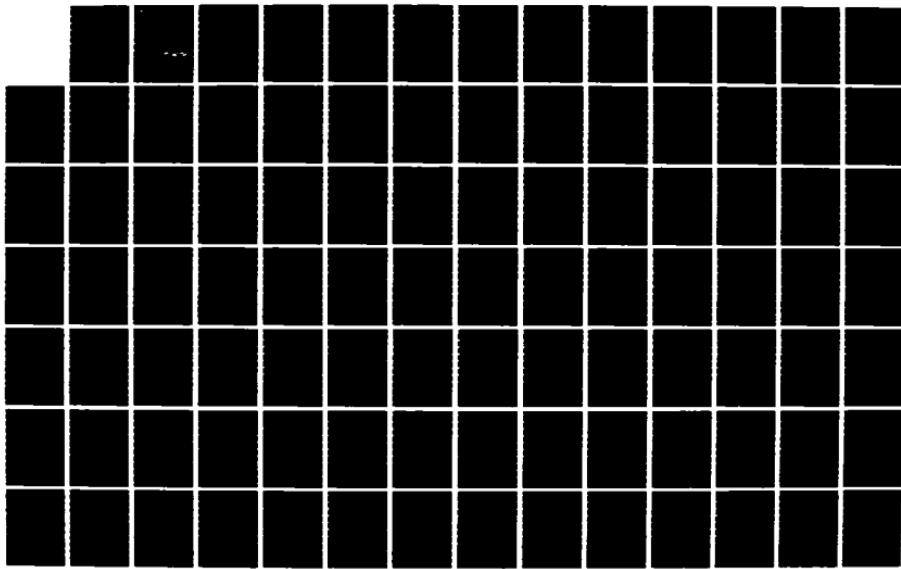
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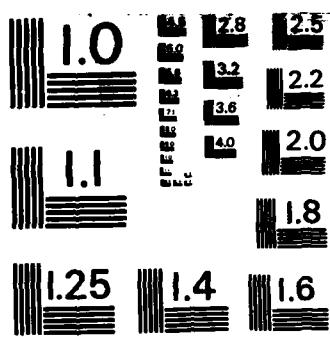
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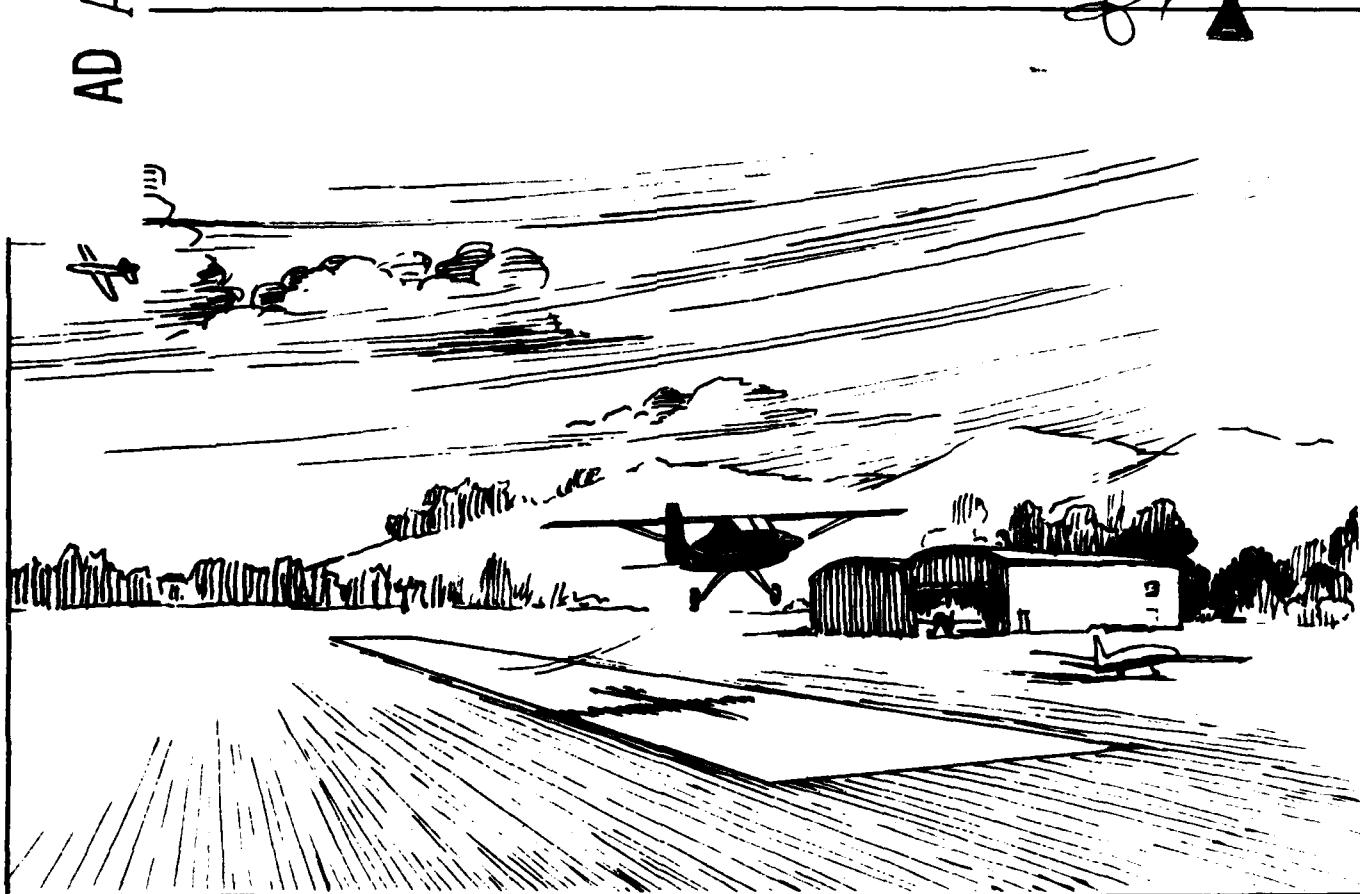
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of Transportation
Federal Aviation
Administration

General Aviation Activity and Avionics Survey

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Annual Summary Report
1982 Data

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Office of Management Systems
Information and Statistics Division

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16. Abstract <p>This report presents the results and a description of the 1982 General Aviation Activity and Avionics Survey. The survey was conducted during 1983 by the FAA to obtain information on the activity and avionics of the United States registered general aviation aircraft fleet, the dominant component of civil aviation in the U.S. The survey was based on a statistically selected sample of about 10.2 percent of the general aviation fleet and obtained a response rate of 68 percent. Survey results are based upon responses but are expanded upward to represent the total population.</p> <p>Survey results revealed that during 1982 an estimated 36.5 million hours of flying time were logged by the 209,779 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 174 hours. The active aircraft represented about 82 percent of the registered general aviation fleet. The report contains breakdowns of these and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Also included are fuel consumption, lifetime airframe hours, avionics, and engine hours estimates. In addition, tables are included for detailed analysis of the avionics capabilities of the GA fleet.</p>		
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METRIC CONVERSION FACTORS

Appendix: Conversions to Metric Measures			
What You Know	Multiply by	To Find	
Symbol			
		<u>LENGTH</u>	
inches	2.5	centimeters	
feet	.30	centimeters	
yards	.91	centimeters	
miles		kilometers	
		<u>AREA</u>	
square inches	.0006	square centimeters	
square feet	.093	square meters	
square yards	.837	square meters	
square miles	2.59	square kilometers	
		<u>MASS (weight)</u>	
ounces	.028	grams	
pounds	.454	kilograms	
short tons (2000 lb)	.91	metric tons	
		<u>VOLUME</u>	
cubic inches	.016	cubic centimeters	
cubic feet	.028	cubic meters	
cubic yards	.24	cubic meters	
cubic miles	670	cubic kilometers	
		<u>TEMPERATURE (heat)</u>	
degrees Fahrenheit	5/9 (degrees Celsius) + 32	degrees Celsius	
degrees Celsius	9/5 (degrees Fahrenheit) - 457.2	degrees Fahrenheit	

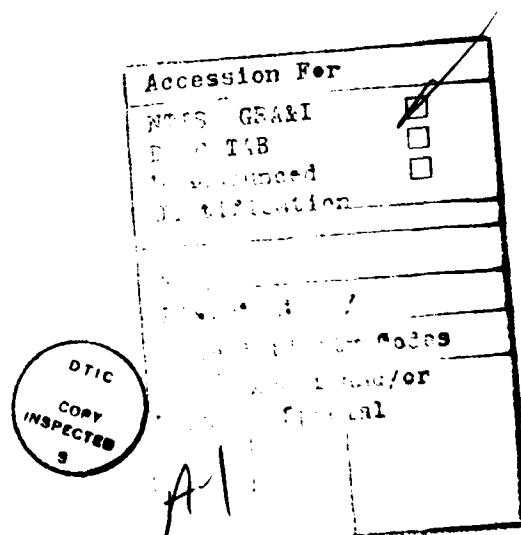
Appropriate Conversions from Metric Measures		Symbol	When You Know	What You're Trying to Find	To Find
<u>LENGTH</u>					
millimeters	0.001			centimeters	
centimeters	0.1			centimeters	
meters	3.3			feet	
kilometers	1.1			yards	
	0.6			miles	
<u>AREA</u>					
square centimeters	0.16			square inches	
square meters	1.2			square yards	
square kilometers	0.000 000 1			square miles	
hectares (10,000 m ²)	2.5			acres	
<u>WEIGHT (mass)</u>					
grams	0.001			ounces	
kilograms	2.2			pounds	
tonnes (1,000 kg)	1.1			short tons	
<u>VOLUME</u>					
milliliters	0.03			fluid ounces	
liters	2.1			pints	
liters	1.06			quarts	
liters	0.26			gallons	
cubic meters	35			cubic feet	
cubic meters	1.3			cubic yards	
<u>TEMPERATURE (heat)</u>					
Celsius temperature	5/9 (from add 32)			Fahrenheit temperature	
<u>TIME</u>					
days	24			hours	
hours	60			minutes	
minutes	60			seconds	

PREFACE

This report presents the results of the 1982 General Aviation Activity and Avionics Survey. The survey is the continuation of an FAA data collection program to gain information on the activities and avionics equipment of the general aviation aircraft fleet. The results represent the cumulative effort of several agencies within the Department of Transportation. Within the FAA, the Information and Statistics Division sponsored and coordinated the activities associated with the survey. The Transportation Systems Center (TSC), under Project Plan Agreement with the FAA, developed the sample design and computer system for sample selection, data editing and estimation of results, ran the system during survey production, analyzed survey results, and prepared the survey report. TSC transferred the survey responses to machine readable forms and was also responsible for printing names, addresses, and aircraft information on the survey questionnaires.

The authors would like to acknowledge contributions to this report by: Nicholas Soldo, Carolyn Edwards, and Patricia Carter, AMS-220, who guided the project and reviewed the report text; and Marilyn Marotta of Systems Development Corporation, who revised the computer programs for the 1982 survey and performed the production runs to produce the estimates contained in this report.

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EXECUTIVE SUMMARY

This report presents the results of the sixth General Aviation Activity and Avionics Survey, conducted in 1983 by the Federal Aviation Administration to obtain information on the activities and avionics of the 1982 general aviation aircraft fleet, the major component of civil aviation in the United States. The FAA selected a statistically designed sample of about 10.2 percent of the registered general aviation fleet to participate in the survey. The sampled aircraft represented all states and FAA regions, and all of the major manufacturer/model groups of aircraft. The survey was conducted through a mailed questionnaire, yielding in total a response rate of 68 percent.

Some important survey findings appear below:

- o An estimated 36.5 million hours of flying time were logged by the 209,779 active general aviation aircraft in the U.S. fleet during 1982. There was a 1.6 percent decrease in the number of active aircraft from 1981 to 1982. The active aircraft had a mean flight time per aircraft of 174 hours and represented about 82 percent of the registered general aviation fleet.
- o Turbojet aircraft flew a mean of 404 hours during 1982, more than any other aircraft type. This marks a deviation from prior years, when turboprops flew the highest level of mean hours per aircraft. Turboprop aircraft were second this year, with a mean of 396 hours. Twin engine turboprops with thirteen or more seats flew almost 853 hours per aircraft. In contrast, single engine piston powered aircraft with less than four seats averaged approximately 145 hours.
- o The most common primary use of general aviation aircraft was personal for an estimated 45 percent of the active fleet, followed by business for 23 percent of the fleet, and executive for almost 8 percent of the fleet.
- o The most populous region in terms of based aircraft was the Great Lakes Region, which housed an estimated 18 percent of all registered general aviation aircraft, followed closely by the Western-Pacific Region with 16.7 percent. The most populous state was California, which housed 13 percent of the registered aircraft.
- o Over 84 percent of the general aviation aircraft had two-way VHF communication equipment, 64 percent were equipped with 4096-code transponders, about 56 percent had at least one component of an instrument landing system, and 80 percent had some form of navigation equipment.
- o An estimated 24.5 percent of general aviation aircraft had avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 68.4 percent of the GA fleet could not fly above 12,500 feet due to avionics limitations alone.

- o An estimated 42 percent of the active general aviation fleet flew by instrument flight rules (IFR) at some time during 1982.
- o Over 75 percent of the total hours logged by the 1982 general aviation fleet were flown in visual meteorological (VM) conditions during the day. Aircraft flown in VM night, instrument meteorological (IM) day, and IM night conditions accounted for 11 percent, 10 percent, and 4 percent of the total hours flown, respectively.
- o The general aviation aircraft fleet consumed an estimated 1,335 million gallons of fuel during 1982, 448 million gallons of aviation gasoline and 887 million gallons of jet fuel.

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1. INTRODUCTION

1.1 GENERAL

1.1.1 Purpose of Survey

The purpose of the General Aviation Activity and Avionics Survey is to provide the Federal Aviation Administration (FAA) with information on the activity and avionics of the general aviation fleet. Figure 1.1 underscores the importance of general aviation to the United States civil air fleet. During calendar year 1982 general aviation composed over 98 percent of the U.S. civil air fleet¹, accounted for 81 percent of civil operations at FAA towered airports², and logged over 84 percent of the total hours flown by the U.S. civil air fleet³. The information obtained from the survey enables the FAA to monitor the general aviation fleet so that it can, among other activities, anticipate and meet demand for National Airspace System facilities and services, assess the impact of regulatory changes on the general aviation fleet, and implement measures to assure the safe operation in the airspace of all aircraft.

1.1.2 Background

Prior to the current survey method, the FAA used the Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73, in its data collection program on general aviation activity and avionics. The form, sent annually to all owners of civil aircraft in the U.S., served two purposes: (1) Part 1 was the mandatory aircraft registration renewal form, (2) Part 2 was voluntary and applied to general aviation aircraft only, asking questions on the owner-discretionary characteristics of the aircraft such as flight hours, avionics equipment, base location, and use. In 1978, the FAA replaced AC Form 8050-73 with a new system: Part 1 was replaced by a triennial registration program; Part 2 was replaced by the General Aviation Activity and Avionics Survey, FAA Form 1800-54. (See Appendix A.3.) The survey was to be conducted annually based on a statistically selected sample of general aviation aircraft, requesting the same type of information as Part 2 of AC Form 8050-73. The first General Aviation Activity and Avionics Survey took place in 1978, collecting data on the 1977 general aviation fleet. The 1982 statistics in this report were derived from the sixth survey, which took place in 1983. Benefits resulting from the new method of data collection included quicker processing of the results, improved data quality, and a considerable savings in time and money to both the public and the Federal Government.

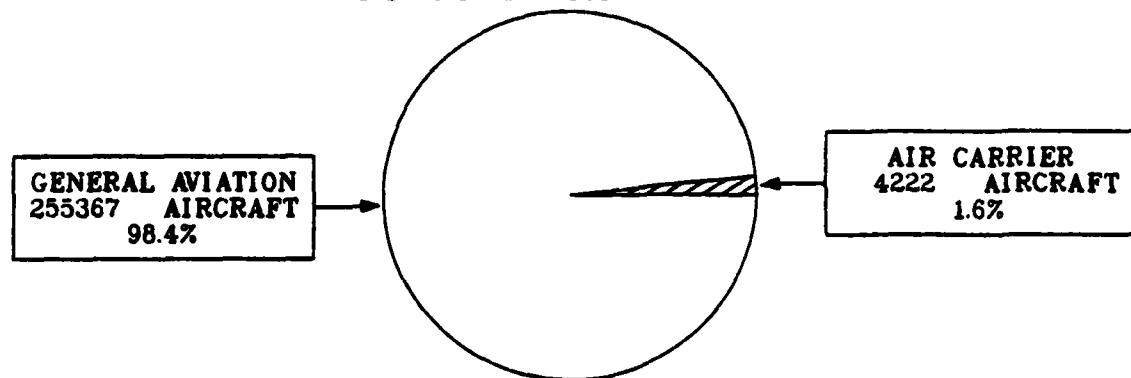
¹Census of U.S. Civil Aircraft, Calendar Year 1982, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1983), p. 4.

²"FAA Air Traffic Activity, Calendar Year 1982 Report," Federal Aviation Administration, (Washington, DC, 1983).

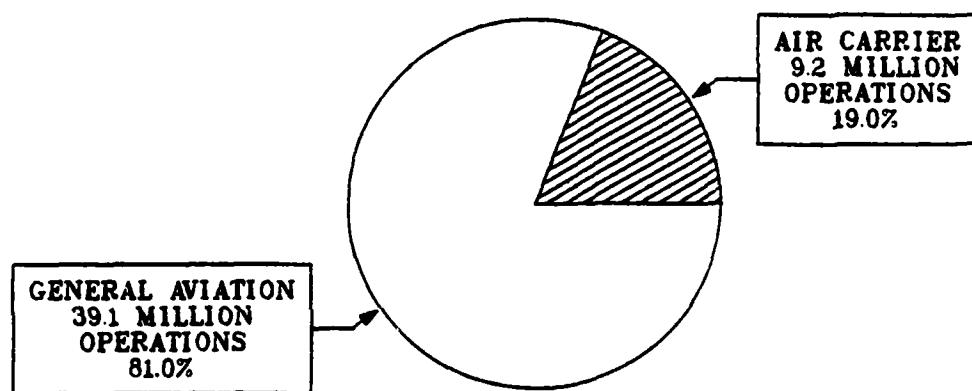
Note: General aviation as used in this report combines both general aviation and air taxi from the source above.

³Air Carrier: Census of U.S. Civil Aircraft, Calendar Year 1982, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1983), p. 21. General Aviation: Table 2.4

US CIVIL AIR FLEET



CIVIL OPERATIONS AT FAA TOWERED AIRPORTS



FLYING TIME

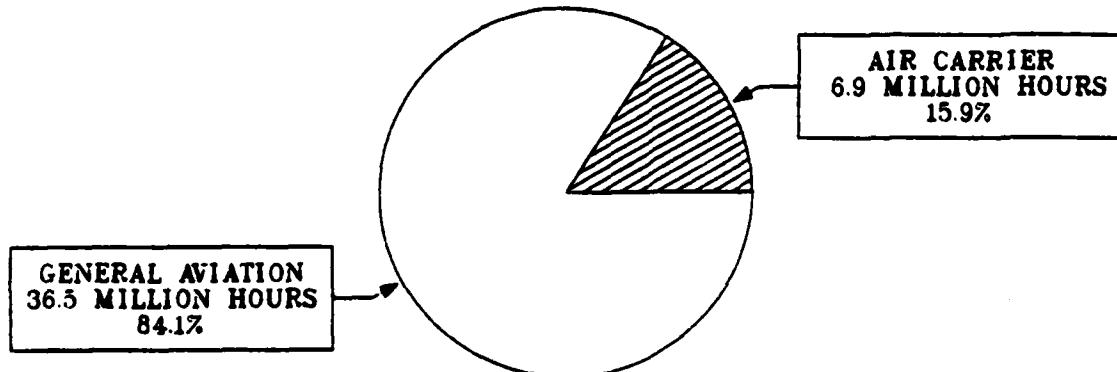


FIGURE 1-1. A CONTRAST OF GENERAL AVIATION AND AIR CARRIER ACTIVITY IN 1982

1.2 SURVEY COVERAGE

1.2.1 Aircraft

The General Aviation Activity and Avionics Survey covers, through a stratified probability sample, all general aviation aircraft registered in the United States. The term "general aviation," as used for this survey, is defined as all aircraft in the U.S. civil air fleet except those operated under Federal Aviation Regulations Parts 121 and 127. These two parts cover the operations of fixed wing aircraft and rotorcraft, respectively, that 1) have been issued a certificate of public convenience and necessity by the Civil Aeronautics Board authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations, and 2) are used by large aircraft commercial operators. General aviation thus includes aircraft operated under:

Part 91: General operating and flight rules.

Part 123: Certification and operations: air travel clubs using large airplanes.

Part 133: Rotorcraft external load operations.

Part 135: Air taxi operators and commercial operators of small aircraft.

Part 137: Agricultural aircraft operations.

General aviation offers such varied services as air taxi, air cargo, industrial, agricultural, business, personal, instructional, research, patrol, and sport flying. General aviation aircraft range in complexity from simple gliders and balloons to four engine turbojets.

Certain aircraft meeting the general aviation criteria have been excluded from the survey. This group consists of aircraft registered to dealers, aircraft in the process of being sold or with registration pending, and aircraft for which not enough information was available to categorize them properly for sampling purposes.

1.2.2 Geographic

The sample survey covers general aviation aircraft registered with the United States Aircraft Registry as of December 31, 1982. Over 99 percent of these aircraft are registered to owners living in the 50 states and Washington, D.C., with about 0.15 percent (372 aircraft) registered in Puerto Rico and other U.S. territories, and 0.45 percent (1,161 aircraft) registered to owners living in foreign countries¹.

1.2.3 Content

Appendix A.3 contains a copy of the survey questionnaire, FAA Form 1800-54. The questionnaire requests the owner to provide the following information on the sampled aircraft's characteristics and uses for various periods:

¹Source: FAA Aircraft Registration Master File as of December 31, 1982.

- 1) Hours by use, IFR hours, percentage of hours flown in Instrument Meteorological (IM) and Visual Meteorological (VM) conditions during the day and evening, and fuel consumption for entire calendar year 1982,
- 2) Airframe hour reading and location of aircraft base as of December 31, 1982, and
- 3) Avionics equipment currently on board.

1.3 SURVEY METHOD

The method of collecting data for this survey was the mail questionnaire, sent to the owners of the sampled aircraft in two mailings. The first mailing in February, 1983, covered all 26,067 aircraft in the sample and had a response rate of 57 percent as shown in Table 1-1. This was about 85 percent of the total responses to the survey. The second mailing conducted in March, 1983, included only those aircraft in the sample that had not yet responded. The second mailing had a response rate of 25 percent which accounted for 15 percent of the total responses to the survey. The combined response rate for the two mailings was 68 percent.

TABLE 1-1. SUMMARY OF RESPONSE INFORMATION BY SURVEY PHASE

SURVEY PHASE	SAMPLE SIZE (S)	NUMBER OF RESPONSES (R)	RESPONSE RATE (R/S X 100%)	PORTION OF TOTAL RESPONSE (R/TOTAL R X 100%)
FIRST MAILING	26,067	14,984	57%	85%
SECOND MAILING	10,868	2,716	25%	15%
TOTAL	26,067	17,700	68%	100%

1.4 SUMMARY OF SURVEY RESULTS

1.4.1 National Scene

Results of the General Aviation Activity and Avionics Survey at the national level revealed that during 1982 an estimated 36.5 million hours of flying time were logged by the 209,779 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 174 hours. These aircraft comprised 82 percent of the registered general aviation fleet. The statistics for 1982 showed a 10.3 percent decrease in flying hours, a 1.6 percent decrease in the number of active aircraft in the general aviation fleet, and a 7.5 percent decrease in mean hours per aircraft over the comparable figures for 1981. Longer-term trends for these variables are found in Figures 1.2, 1.3, and 1.4. Activity estimates for 1982 indicate an overall slowing in the growth of general aviation activity. The decrease seen in hours flown can most likely be attributed to the decline in the economy and rising aircraft operational costs. Other general aviation activity measures showed trends similar to those seen in the General Aviation Activity and Avionics Survey. For example, general aviation operations at FAA towered airports decreased by 16.6 percent from 1981 to 1982. Some of this decrease may be attributed to the air traffic controller strike which occurred during 1981. On August 3, 1981, about 11,000 controllers failed to report to work and were subsequently fired. The resultant reduced work force caused the FAA to institute certain constraints on users of the National Airspace System to assure safe and efficient operations. The strike affected traffic levels during 1982 as well as the last five months of 1981. Reductions in traffic levels due to restrictions imposed by the FAA cannot be measured precisely, because of the effects of other variables which impact traffic volumes.

1.4.2 Results by Aircraft Type

Total flight time and the active aircraft count for the general aviation fleet grew at annual rates of 0.37 percent and 2.62 percent, respectively, from 1977 through 1982. However, significant deviations from these mean rates occurred among the individual aircraft types. Tables 1-2 and 1-3, which contain the five-year trends in growth for total hours flown and active aircraft, illustrate this point. The last column in each table reveals the compound annual growth rates by aircraft type from 1977 to 1982. Table 1-2 illustrates that the "other turboprop" aircraft category grew at the highest rate (17.28 percent) in terms of total hours flown. This group was followed by the "other turbojet" category which had a growth rate of 16.70 percent. Twin engine turboprops with 1-12 seats were third, at 12.06 percent. In contrast, the following aircraft types experienced a decline in total hours flown over the five year period: fixed wing single engine piston, fixed wing twin engine piston with 1-6 seats, fixed wing other piston, fixed wing twin engine turboprops with 13 or more seats, and rotorcraft piston. Table 1-3 shows that the other turboprops also had the highest compound annual growth rate in terms of active general aviation aircraft at 18.41 percent. The other turbojet group followed with a rate of 16.66 percent, while twin engine turboprops with 1-12 seats were third, with a growth rate of 14.23 percent. In contrast, the number of active aircraft in the fixed wing other piston and rotorcraft piston categories declined at rates of 5.11 percent and 1.87 percent, respectively, from 1977 to 1982.

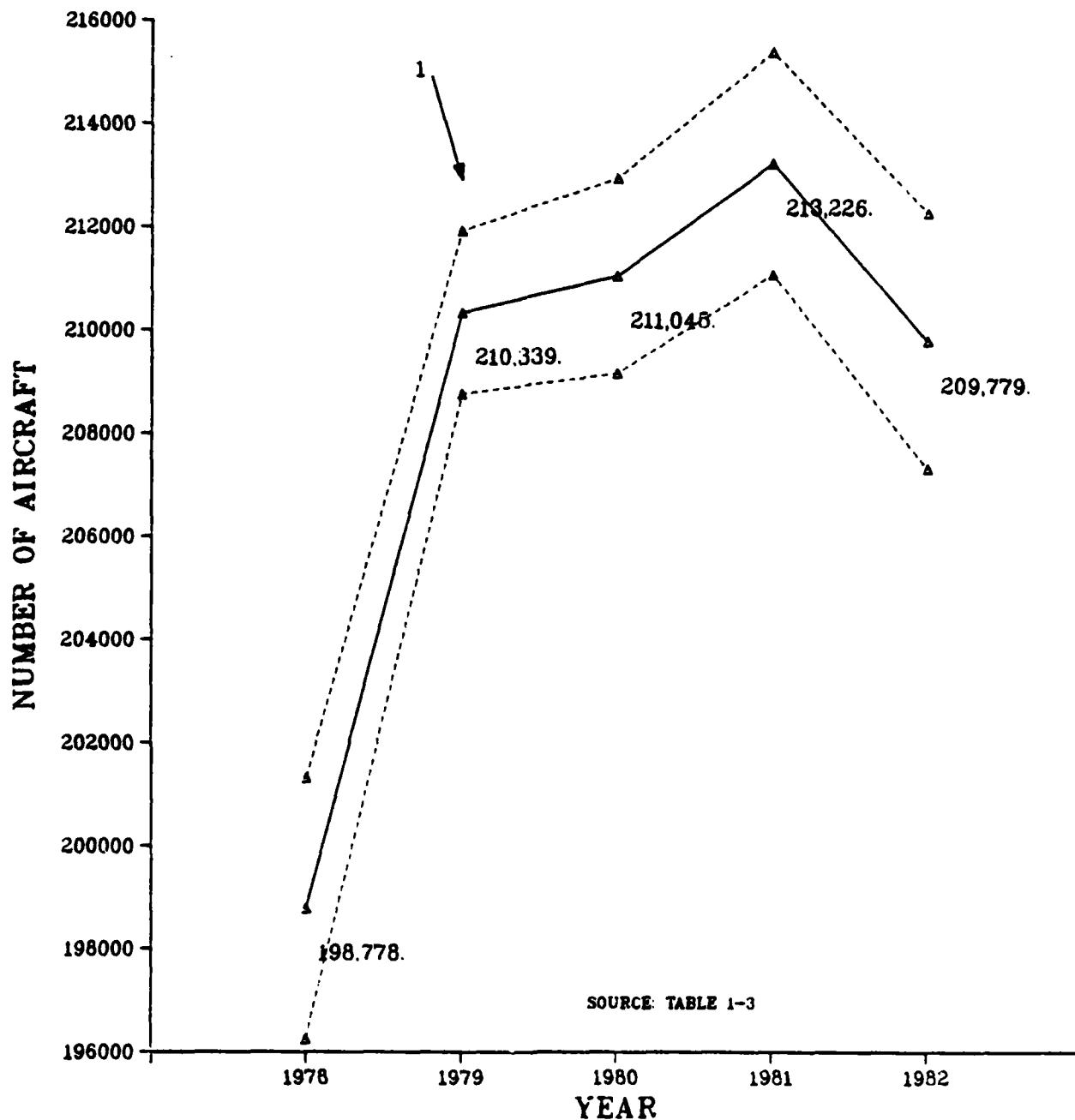
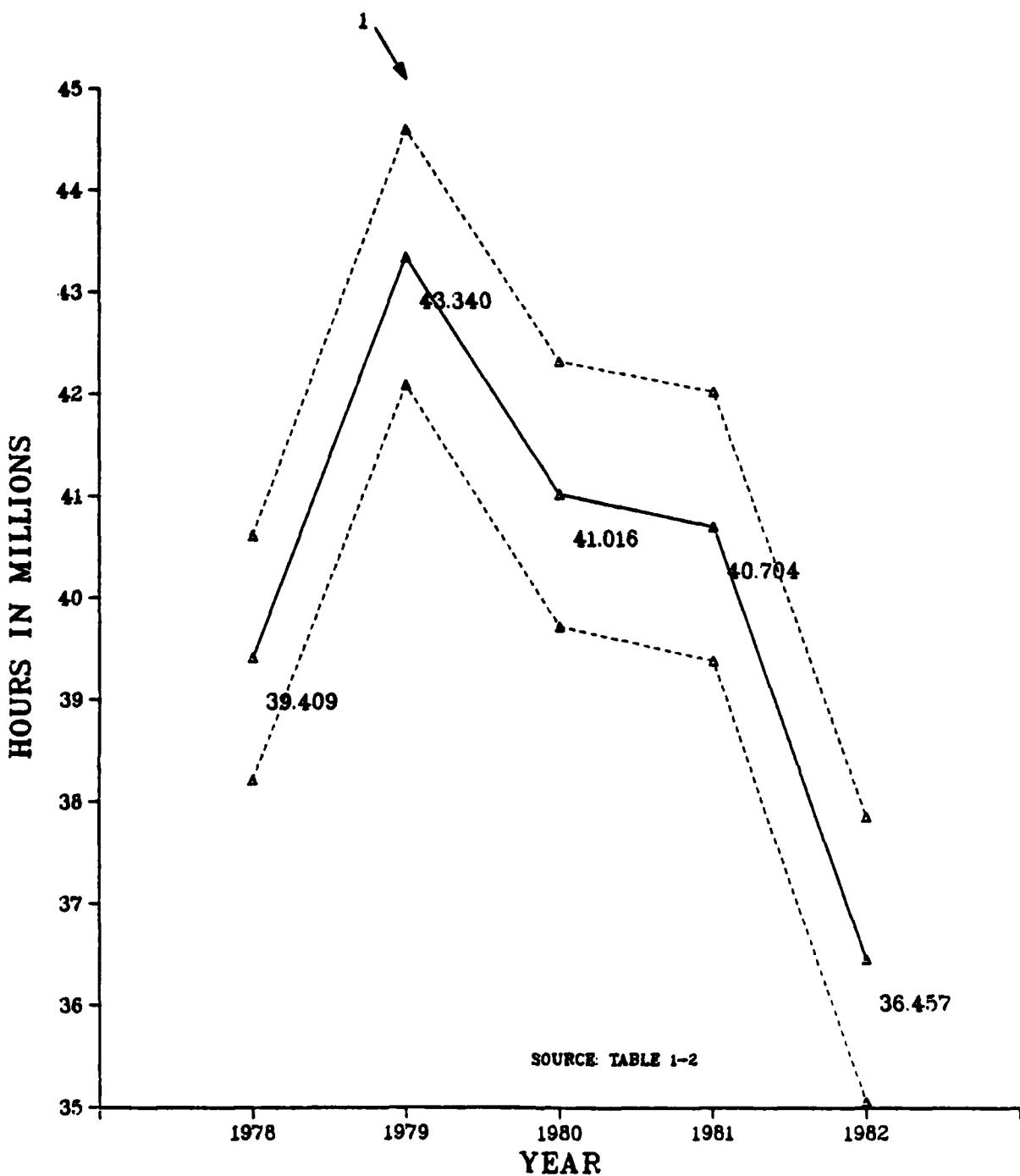
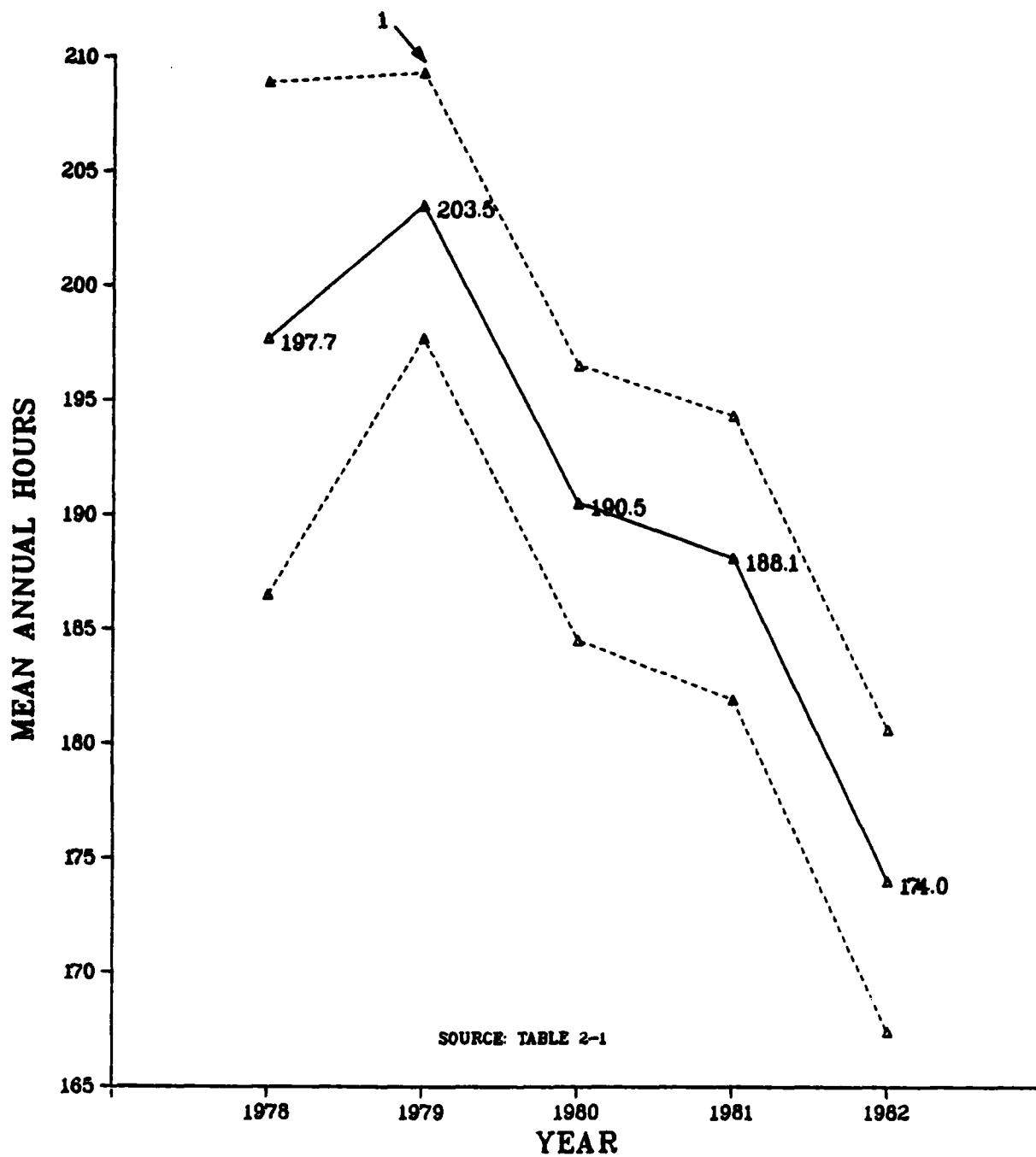


FIGURE 1-2. GENERAL AVIATION ACTIVE FLEET SIZE 1978-1982



1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE
1978 - 1982 TRUE VALUES. SEE APPENDIX B.

FIGURE 1-3. GENERAL AVIATION TOTAL FLYING TIME 1978-1982



L THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE
1978 - 1982 TRUE VALUES. SEE APPENDIX B.

FIGURE 1-4. GENERAL AVIATION MEAN ANNUAL FLYING TIME FOR ACTIVE AIRCRAFT
1978-1982

TABLE 1-2 GROWTH OF GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE, 1977 - 1982
(Thousands of Hours)

<u>AIRCRAFT TYPE</u>	<u>1977</u> (Standard Error)	<u>1978</u> (Standard Error)	<u>1979</u> (Standard Error)	<u>1980</u> (Standard Error)	<u>1981</u> (Standard Error)	<u>1982</u> (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1-3 seats	8,973 (629)	10,111 (570)	11,180 (384)	10,044 (399)	10,185 (399)	8,325 (374)	-1.49
1-engine piston 4+ seats	15,944 (824)	17,746 (992)	19,109 (420)	18,295 (428)	17,506 (432)	15,934 (472)	-.01
2-engine piston 1-6 seats	3,630 (202)	3,644 (241)	4,006 (148)	3,730 (172)	3,606 (144)	3,040 (177)	-3.49
2-engine piston 7+ seats	2,322 (102)	2,439 (189)	2,855 (137)	2,547 (143)	2,762 (153)	2,617 (197)	2.42
Other piston	98 (5)	104 (7)	152 (15)	130 (18)	24 (63)	33 (10)	-19.23
2-engine turboprop 1-12 seats	892 (37)	960 (49)	1,254 (57)	1,489 (55)	1,549 (68)	1,576 (116)	12.06
2-engine turboprop 13+ seats	625 (60)	622 (63)	572 (45)	964 (55)	542 (45)	520 (84)	-3.61
Other turboprop	32 (5)	24 (3)	45 (2)	56 (10)	62 (11)	71 (20)	17.28
2-engine turbojet	1,043 (49)	1,019 (44)	1,125 (39)	1,163 (52)	1,238 (48)	1,347 (98)	5.25
Other turbojet	122 (11)	176 (30)	134 (9)	169 (27)	149 (16)	264 (46)	16.70
ROTORCRAFT							
Piston	609 (90)	806 (79)	892 (97)	736 (75)	930 (108)	579 (58)	-1.01
Turbine	1,259 (93)	1,421 (135)	1,664 (108)	1,603 (115)	1,754 (150)	1,771 (145)	7.06
OTHER	245 (16)	338 (20)	353 (29)	359 (21)	391 (34)	379 (40)	9.12
TOTAL AIRCRAFT	35,792 (1,073)	39,409 (1,199)	43,340 (627)	41,016 (650)	40,704 (659)	36,456 (701)	.37

NOTE: Column summations may differ from printed totals due to estimation procedures.

TABLE 1-3 GROWTH OF ACTIVE GENERAL AVIATION FLEET BY AIRCRAFT TYPE, 1977 - 1982
 (Number of Aircraft)

<u>AIRCRAFT TYPE</u>	<u>1977</u> (Standard Error)	<u>1978</u> (Standard Error)	<u>1979</u> (Standard Error)	<u>1980</u> (Standard Error)	<u>1981</u> (Standard Error)	<u>1982</u> (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1-3 seats	57,340 (851)	59,185 (860)	62,362 (594)	60,505 (688)	59,914 (748)	57,870 (910)	.11
1-engine piston 4+ seats	91,960 (529)	101,466 (857)	106,028 (450)	107,930 (538)	107,983 (656)	106,503 (687)	2.98
2-engine piston 1-6 seats	15,074 (141)	15,621 (259)	16,891 (157)	16,224 (246)	16,749 (246)	16,381 (303)	1.68
2-engine piston 7+ seats	6,226 (86)	7,328 (202)	7,958 (90)	8,141 (153)	8,607 (181)	8,501 (168)	6.43
Other piston	182 (11)	221 (10)	229 (11)	212 (17)	114 (29)	140 (24)	-5.11
2-engine turboprop 1-12 seats	2,276 (15)	2,507 (68)	2,944 (13)	3,339 (41)	3,968 (46)	4,427 (45)	14.23
2-engine turboprop 13+ seats	549 (13)	566 (10)	538 (15)	627 (18)	557 (17)	610 (28)	2.13
Other turboprop	64 (4)	56 (3)	96 (3)	123 (10)	134 (5)	149 (28)	18.41
2-engine turbojet	1,959 (19)	2,115 (27)	2,309 (29)	2,551 (37)	2,808 (68)	3,309 (84)	11.05
Other turbojet	318 (10)	364 (34)	343 (6)	441 (13)	362 (23)	687 (73)	16.66
ROTORCRAFT							
Piston	2,658 (176)	2,922 (155)	3,123 (127)	2,794 (133)	3,250 (173)	2,419 (178)	-1.87
Turbine	2,067 (27)	2,492 (30)	2,740 (50)	3,207 (49)	3,724 (73)	3,749 (140)	12.65
OTHER	3,616 (69)	4,028 (75)	4,770 (114)	4,945 (142)	5,049 (179)	5,233 (211)	7.67
TOTAL AIRCRAFT	184,294 (1,034)	198,778 (1,269)	210,339 (789)	211,045 (945)	213,226 (1,078)	209,779 (1,238)	2.62

NOTE: Column summations may differ from printed totals due to estimation procedures.

There was a great deal of variation in activity among the general aviation aircraft types in terms of three measures resulting from the survey: total hours flown, number of active aircraft, and mean hours flown. Figure 1.5 highlights the variation as well as the relationship of these three measures to each other. Distance along the vertical axis indicates mean flight hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet belonging to each aircraft type, and the area within each box is proportional to the total flying time for the aircraft type. Thus, it is evident that in terms of sheer numbers, single engine piston aircraft dominated the active fleet and contributed the largest portion of total flying time, yet had one of the lowest mean flight times per aircraft. In contrast, the turboprops, turbojet aircraft, and rotorcraft had low representation in the active fleet but contributed a relatively high proportion of flight time resulting in the greatest mean flight hours of any of the major aircraft types.

The general aviation aircraft fleet consumed an estimated 1,335 million gallons of fuel during 1982, 448 million gallons of aviation gasoline and 887 million gallons of jet fuel. From Figure 1.6, it is evident that turbojet and turboprop engines consume fuel at much higher rates than piston engines. In fact, turbojets other than those with 2 engines consume about 705 gallons of jet fuel an hour on the average. The high rates account for turbojets' burning 44 percent of all fuel consumed in 1982, as shown in Figure 1.7. Fixed wing piston aircraft account for 33 percent of the fuel consumed in 1982 due to their high representation in the general aviation fleet. Table 2-21 shows more detailed fuel consumption estimates and their standard errors.

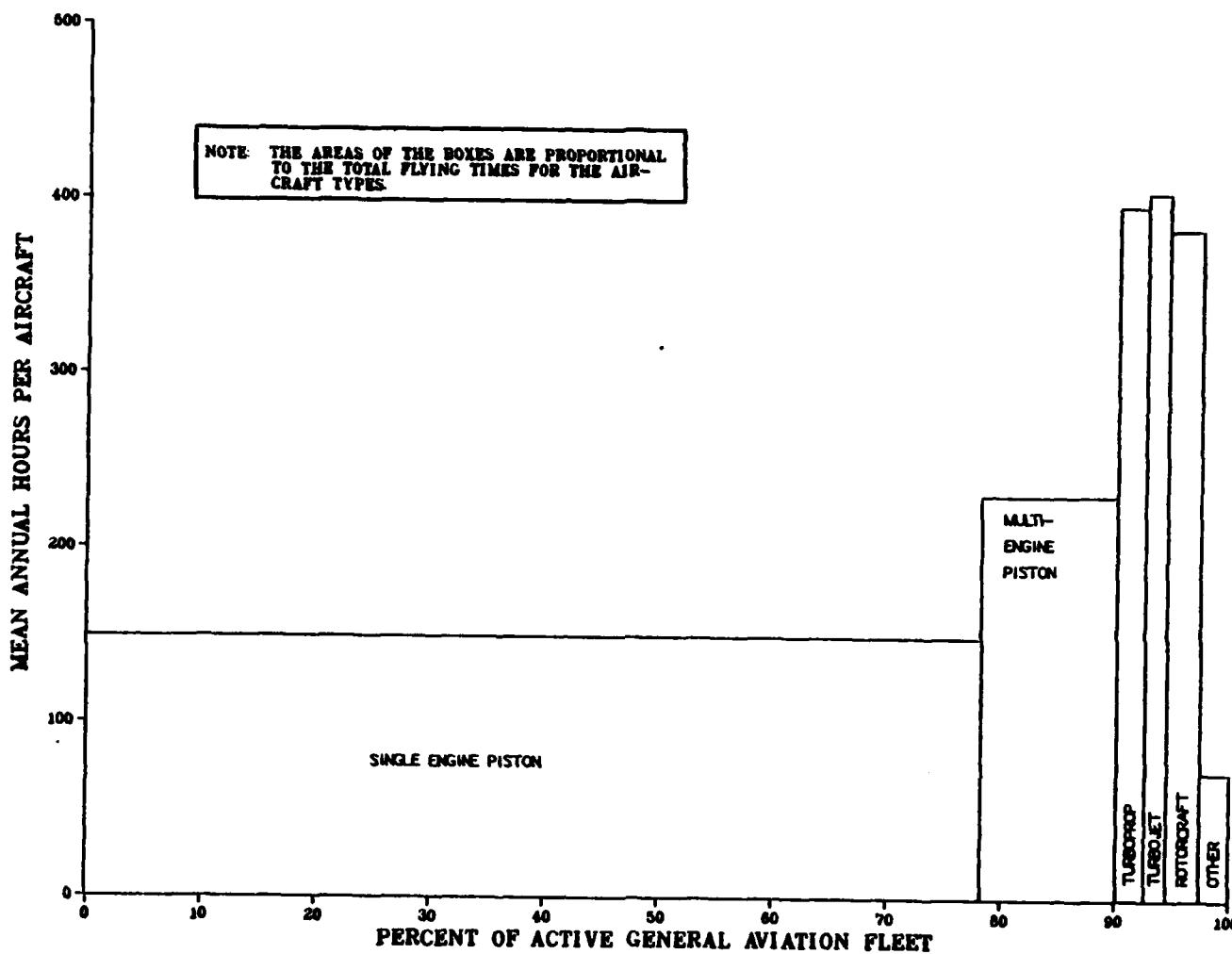
Activity of Ultralight Aircraft - For the 1982 survey, an item asking the respondent to identify whether the aircraft is an ultralight was included on the questionnaire. Approximately 0.5 percent (1,306 aircraft) of the aircraft registered in 1982 were ultralights, 935 of which were active. Ultralights flew a mean of 139.6 hours per aircraft, for a total of 125,800 hours.

1.4.3 Results by Primary Use

Like aircraft types, primary uses were differentiated by their activity characteristics, as shown in Figure 1.8. Distance along the vertical axis indicates mean hours per aircraft. Distance along the horizontal axis indicates the relative portion of the active fleet engaged in each primary use, and the area within each box is proportional to the total flying time for each primary use. Aircraft used as commuter air carriers showed the highest individual usage with a mean of 1,014.8 hours flown per aircraft. Aircraft used for instructional purposes and as air taxis also had fairly high levels of individual usage with mean hours flown per aircraft of 334.8 and 392.5, respectively. General aviation aircraft were used most commonly for personal and business purposes, representing 45 and 23 percent of the active fleet. While total hours flown for the general aviation fleet declined by over 10 percent from 1981 to 1982, flying time for aircraft in the commuter carrier, air taxi, and other work categories increased by 10.9 percent, 13.5 percent, and 26.8 percent, respectively. These were the only categories of aircraft for which flying time increased from 1981 to 1982.

1.4.4 Results by Flying Conditions

Beginning with the 1982 survey, an item relating to the conditions in which aircraft were flown was included in the questionnaire (see item 8 on the questionnaire in



SOURCE: TABLE 2-1

FIGURE 1-5. 1982 GENERAL AVIATION ACTIVITY MEASURES BY AIRCRAFT TYPE

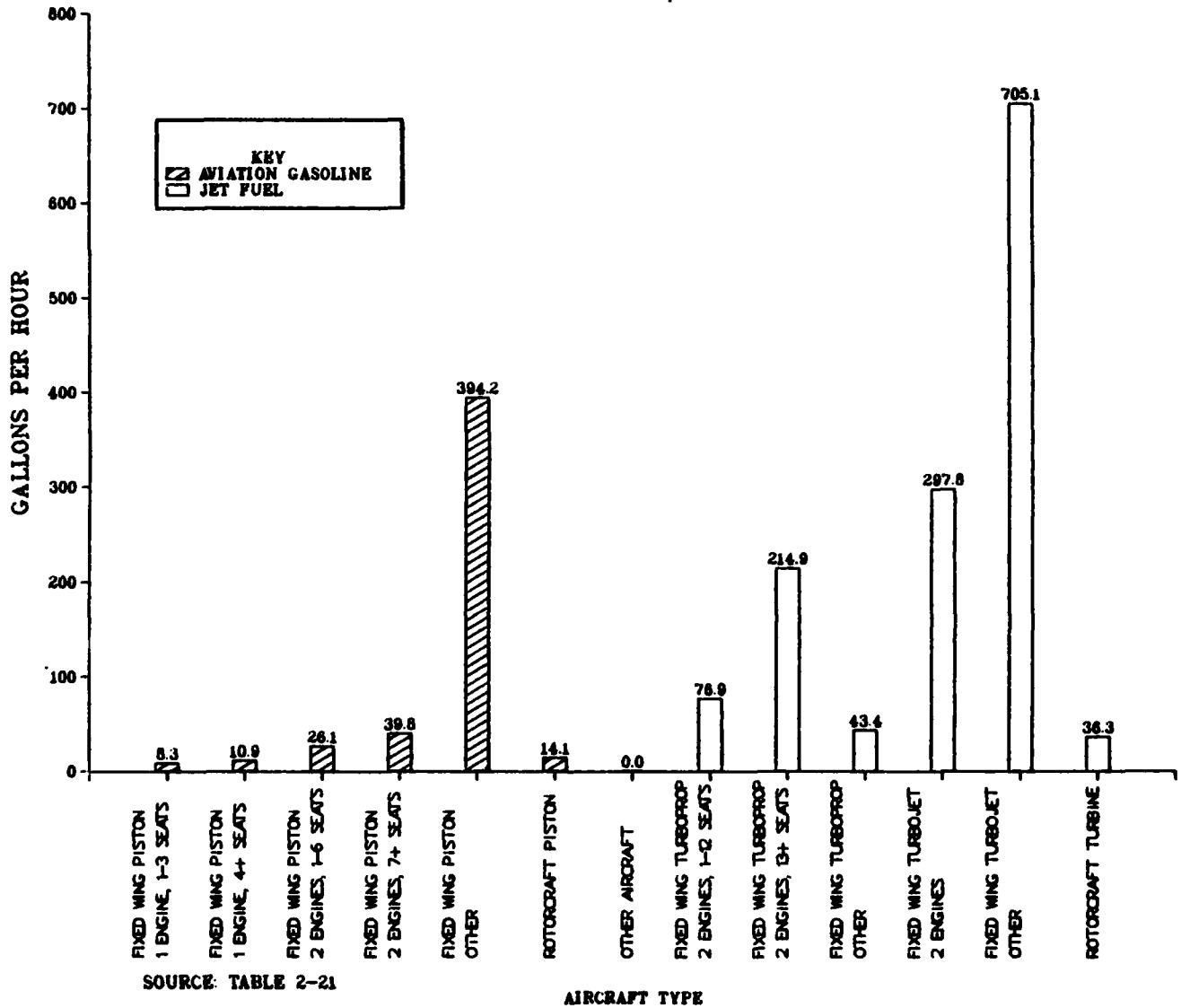
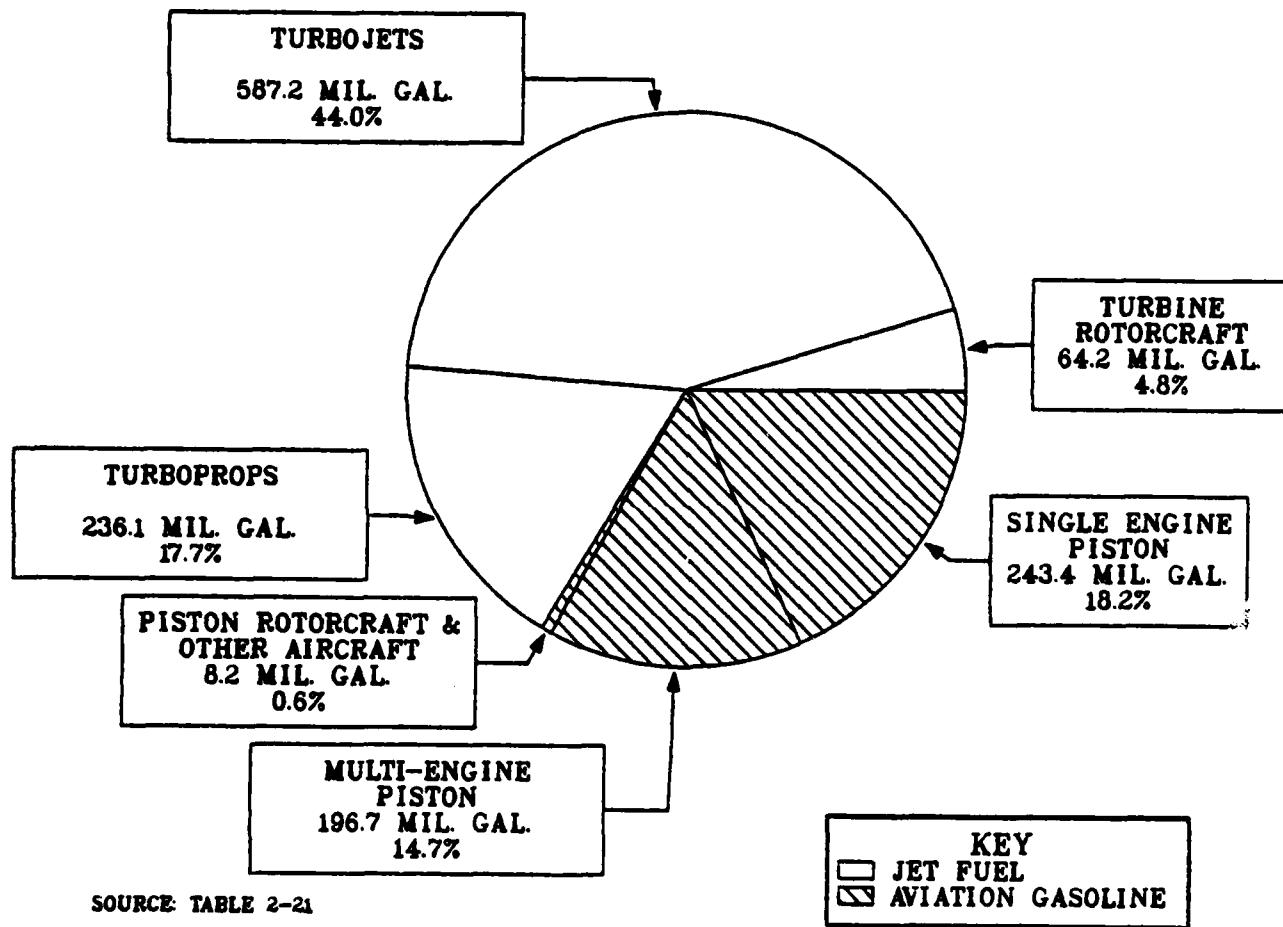
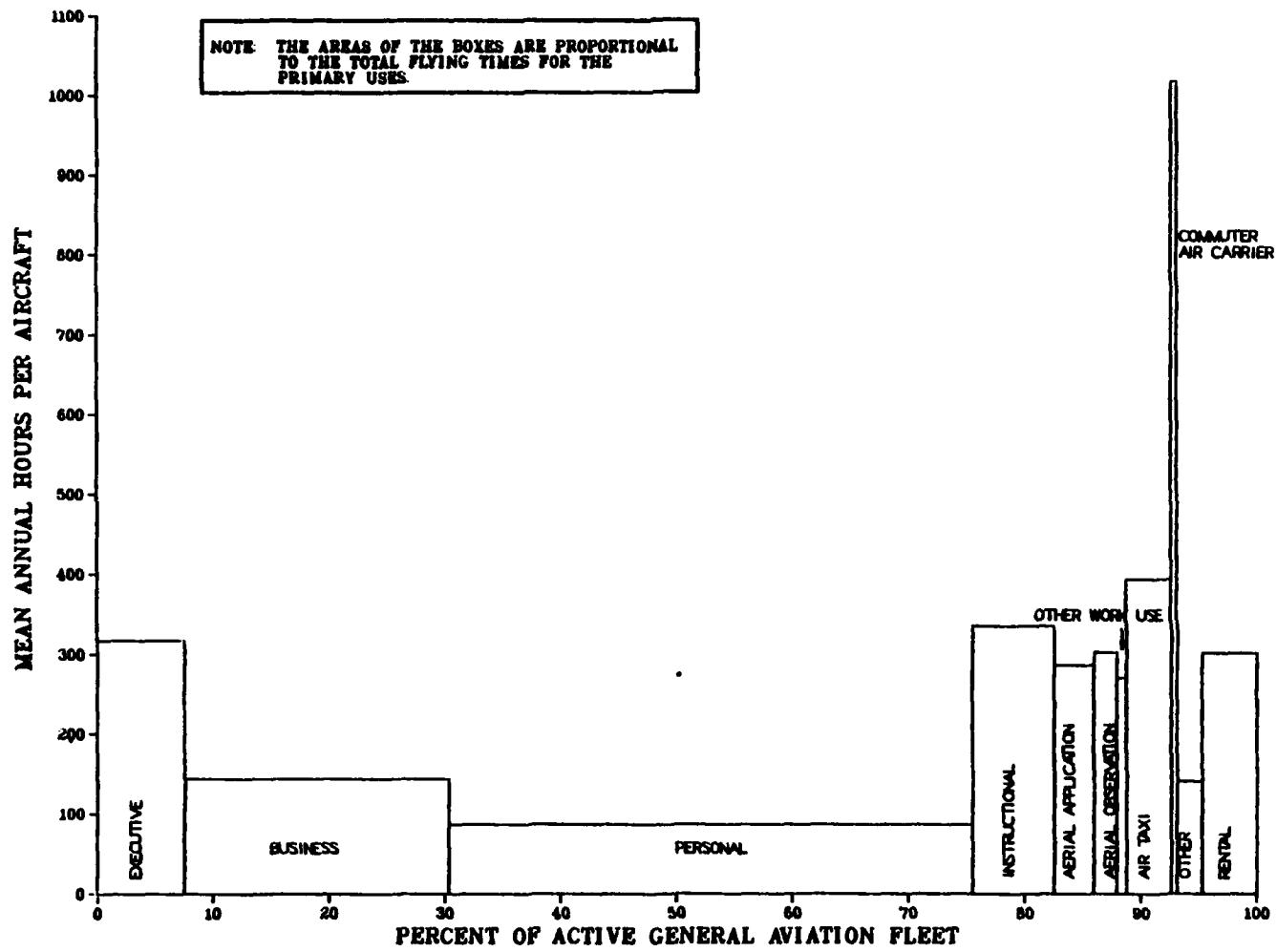


FIGURE 1-6. 1982 MEAN FUEL CONSUMPTION RATES BY AIRCRAFT TYPE



SOURCE: TABLE 2-21

FIGURE 1-7. 1982 ESTIMATED FUEL CONSUMPTION BY AIRCRAFT TYPE



SOURCE: TABLES 2-4, 2-8

FIGURE 1-8. 1982 GENERAL AVIATION ACTIVITY MEASURES BY PRIMARY USE

Appendix A). This question asks the aircraft owner to identify the percentage of total hours flown by the aircraft in Instrument Meteorological (IM) and Visual Meteorological (VM) conditions during day and night hours. The pie chart in Figure 1.9 illustrates the percentage of total hours flown under each of these conditions.

The chart indicates that over 75 percent of the total hours logged by the 1982 general aviation fleet were flown in VM conditions during the day. Aircraft flown in VM night, IM day, and IM night conditions accounted for 11 percent, 10 percent, and 4 percent of the total hours flown, respectively.

Single engine piston aircraft with 4+ seats flew more hours (1.9 million) in IM conditions than any other aircraft type. Twin engine piston aircraft with 7+ seats were second, with 879,243 hours. Single engine piston aircraft with 4+ seats also accounted for more hours (13.7 million) flown in VM conditions than any other aircraft type, while twin engine piston aircraft with 1-6 seats were second, with 2.4 million hours. Table 2-12 contains more data on general aviation annual hours flown by weather and light conditions by aircraft type. In terms of region of based aircraft, aircraft based in the Southern region accounted for more hours (1.15 million) flown in IM conditions than any other region. Aircraft based in the Great Lakes were second, as they accounted for about 1 million of the hours flown in IM conditions. Aircraft based in the Southern and Southwestern regions also accounted for the highest level of hours flown in VM conditions. Table 2-13 gives a detailed breakdown of general aviation annual hours flown by weather and light conditions by region of based aircraft. Table 2-14 lists general aviation annual hours flown by weather and light conditions by SDR manufacturer/model group.

1.4.5 Results by FAA Region

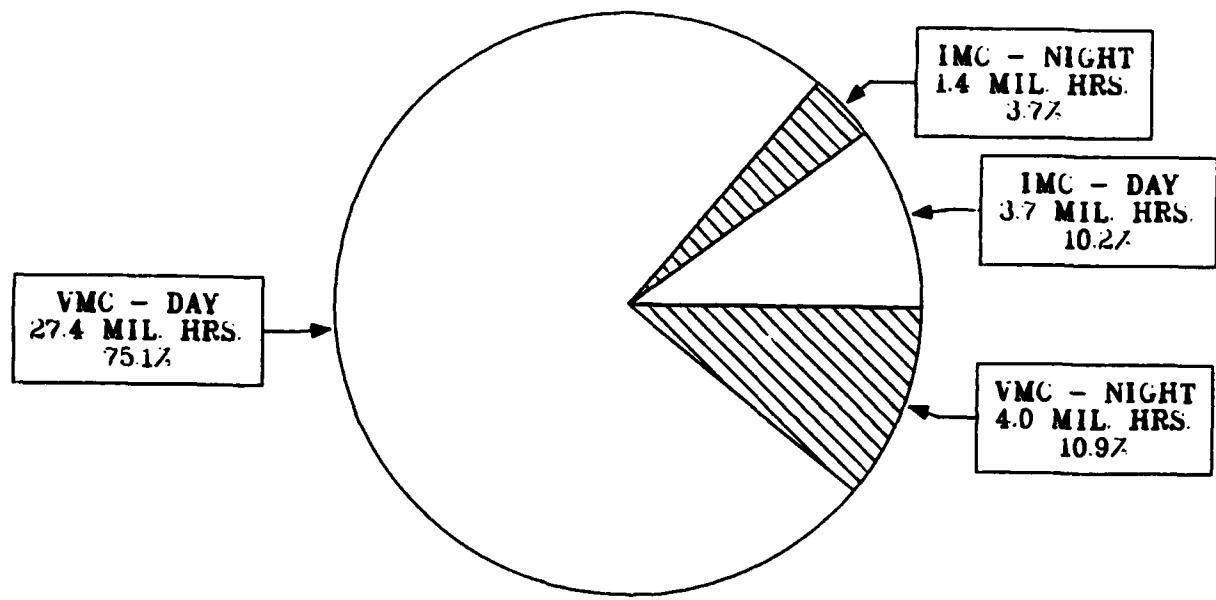
Mean aircraft usage did not differ significantly from region to region with the exception of the Southern and European (Foreign) Regions, according to Figure 1.10. In the figure, distance along the vertical axis indicates mean annual hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet based in each region, and the area within each box is proportional to the total flying time occurring in each region. It can be seen that the Great Lakes Region accounted for more active aircraft than any other region. The Southern Region accounted for more total flight time than any of the other regions, although the Great Lakes, Western-Pacific, and Southwestern Regions are close behind. The smallest region in continental United States was New England, with only 3 percent of the active aircraft and about 3.7 percent of the fleet's total flight time.

Tables 2-3 and 2-8 contain more estimates by region; Tables 2-2 and 2-7 show similar estimates by state of based aircraft.

1.4.6 Results by Avionics Capability

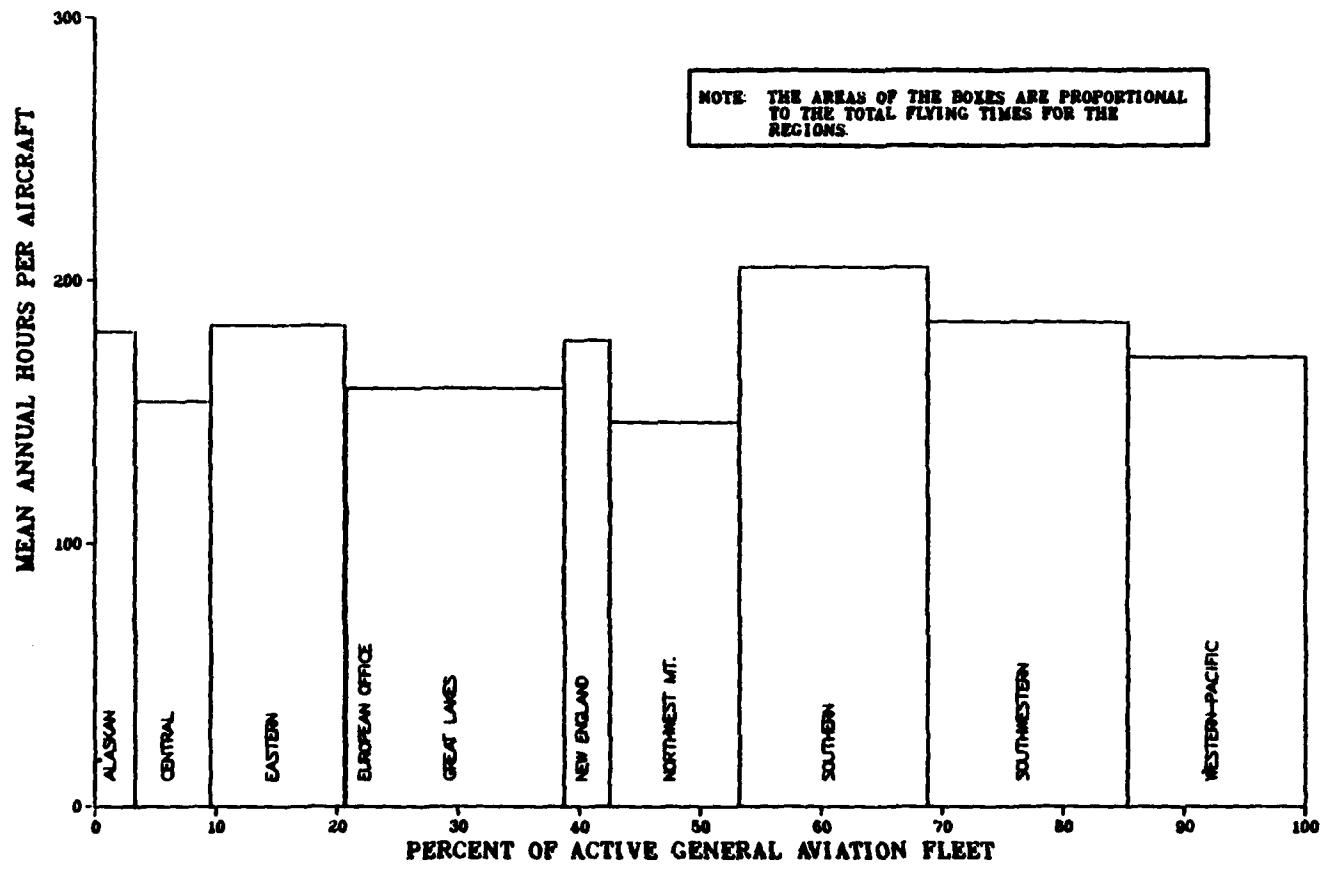
1.4.6.1 Individual Avionics Components

The extent to which general aviation aircraft are furnished with on-board avionics equipment was a principal finding of the survey. A summary appears in Figure 1.11. Over 84 percent of the aircraft have two-way VHF communications,



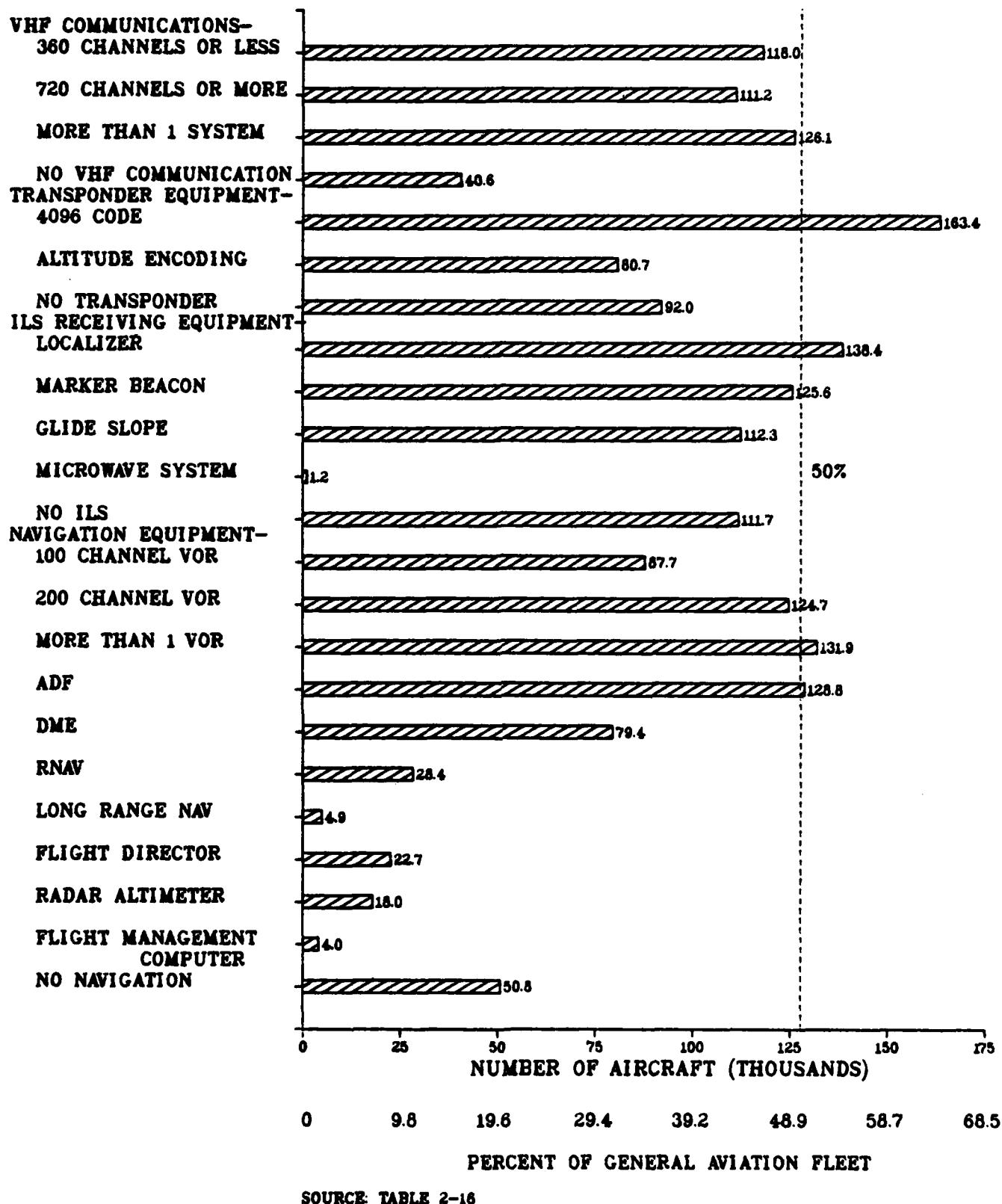
SOURCE: TABLE 2-12

FIGURE 1-9. 1982 GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS



SOURCE: TABLE 2-3

FIGURE 1-10. 1982 GENERAL AVIATION ACTIVITY MEASURES BY FAA REGION



SOURCE: TABLE 2-16

FIGURE 1-11. AVIONICS EQUIPMENT IN THE 1982 GENERAL AVIATION AIRCRAFT FLEET

64 percent are equipped with 4096-code transponders, 56 percent have at least one component of an instrument landing system, and over 80 percent have some form of navigation equipment. It is evident from comparing the 1982 and 1977 avionics estimates that the general aviation fleet is becoming more sophisticated in terms of its avionics equipment. Within two-way communications, for example, there was a significant shift from 360 channel to 720 channel equipment. In terms of transponder equipment, there was a substantial increase in the percentage of the general aviation aircraft containing 4096 code transponders and altitude encoding equipment, while the percentage of aircraft containing no transponder equipment declined considerably over the five year period. In terms of VOR receivers there was a shift from 100 channel to 200 channel equipment. The proportion of the general aviation fleet with transponders increased from 53.3 percent in 1978 to 64 percent in 1982, and the proportion with at least one part of an ILS increased from 51.0 percent to 56.2 percent. The proportion of aircraft having two or more communications systems increased by more than 7.2 percent from 1978 to 1982. The proportion with two or more VOR receivers increased by 6.1 percent over the same five year period. More detailed breakdowns of avionics by aircraft type, state, region, and primary use are provided in Tables 2-15 through 2-18.

Figure 1.12 shows the portion of active aircraft of each type which engaged in IFR (Instrument Flight Rules) flight during 1982 and further, the portions that flew IFR with and without transponder equipment. It can be seen that almost all active twin engine piston aircraft, turboprops, and turbojets flew IFR at some time during 1982 and were equipped with transponders. Although a much lower proportion of the active single engine piston aircraft and rotorcraft in the fleet flew IFR during the year, almost all that did were equipped with transponders. In fact, almost 100 percent of IFR flying was performed by aircraft equipped with transponders.

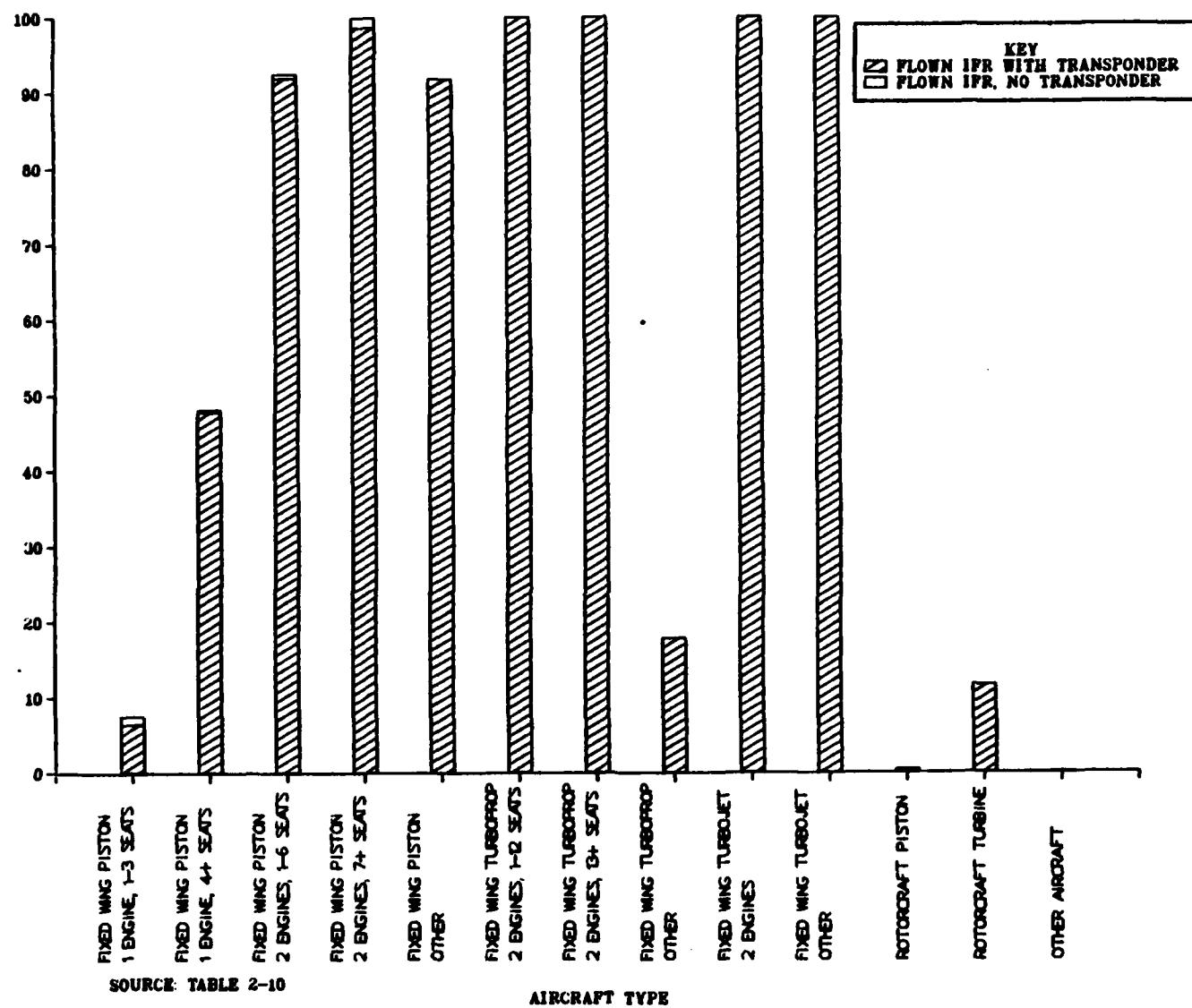
1.4.6.2 Avionics Capability Groups

Estimates of the number of aircraft containing individual pieces of avionics equipment are somewhat limited because they do not provide the means to determine an aircraft's overall ability to use the National Airspace System (NAS). Often several pieces of equipment are required to obtain a certain capability in the NAS; it thus becomes necessary to study groups of avionics, rather than individual pieces. Therefore, avionics capability groups were developed to provide a framework for the GA fleet relating airborne avionics equipment to aircraft capability to perform in the NAS, and within this framework to analyze the activity and other characteristics of the GA fleet.

The methodology and assumptions for developing avionics capability groups are detailed in General Aviation Avionics Statistics.¹ This report also contains a glossary which explains numerous terms relating to avionics equipment and the National Airspace System.

¹General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), pp.5-10.

PERCENT OF ACTIVE AIRCRAFT



SOURCE: TABLE 2-10

FIGURE 1-12. 1982 GENERAL AVIATION ACTIVE AIRCRAFT FLOWN IFR AND TRANSPOUNDER EQUIPPED

Two classifications of capability groups (CG's) were developed. The first type consists of avionics equipment meeting FAA requirements for use of various aspects of the NAS. FAA regulations deal with three basic capabilities: (1) to fly in different segments of the airspace, (2) to fly under visual flight rules (VFR) and instrument flight rules (IFR) type of flight, and (3) to land at different classes of airports. In the formation of CG's of avionics equipment which relate to these three capabilities, the groups take on a hierarchical nature; that is, there is an order to the groups. Thus, the first type of CG became known as hierarchical. In general, the avionics equipment and the associated capabilities for one capability group are a subset of the avionics equipment and the associated capabilities for the next higher group.

The second type of capability group, non-hierarchical, consists of avionics which give an aircraft additional capability but which are not required equipment according to FAA regulations. The formation of the second type of CG involved grouping component pieces of avionics equipment which together would form a complete avionics system for enabling an aircraft to make full use of a landing, communications, or navigation system in the NAS.

Hierarchical CG's are described in Table 1-4 in terms of avionics equipment and associated capabilities. Non-hierarchical CG's are described in Table 1-5.

Table 2-22 presents the estimates of the number of GA aircraft found in the hierarchical and non-hierarchical CG's. Examination of Table 2-22 reveals the following on the GA fleet:

- a. About 24.5 percent of GA aircraft have avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 68.4 percent of the GA fleet cannot fly above 12,500 feet due to avionics limitations alone.
- b. Over 78 percent of GA aircraft are equipped to fly IFR.
- c. Almost sixteen percent of the GA fleet are limited to landing at uncontrolled airports. Approximately 22 percent can land at either uncontrolled airports or Group III TCA's. Approximately 31 percent can land at any type of airport except a Group I TCA. About 31 percent can land at Group I TCA's. This proportion has increased constantly over the past 5 years.
- d. In general, Table 2-22 indicates that those aircraft in the least sophisticated non-hierarchical CG's also comprise the bulk of the least sophisticated hierarchical CG's. Of the aircraft possessing none of the non-hierarchical CG equipment (i.e. NO GROUP), 74.5 percent fall into hierarchical CG's 1, 2, and 3. Similarly, those aircraft in the most sophisticated non-hierarchical CG's are also in the most sophisticated hierarchical CG's. For example, 94 percent of the aircraft possessing a complete ILS and a radar altimeter fall into hierarchical CG 8.

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITES
<u>Group 1</u> No regulatory avionics	<ol style="list-style-type: none"> 1. Up to and including 12,500 feet mean sea level (MSL) Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV ...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL 2. VFR flight, day and night 3. Uncontrolled airports
<u>Group 2</u> Two-way Communications	<ol style="list-style-type: none"> 1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters ... with 4096 code transponders...Group III TCA's All helicopters...Group I and II TCA's below 1,000 feet above ground level (AGL) <p>NOTE: Air taxis with navigation system and transponder: Group II TCA's</p> <p>Air taxis with navigation system, transponder and altitude reporting: Group I TCA's and non-positive controlled airspace</p> <p>Air taxis with navigation system, DME, transponder and altitude reporting: Group I TCA's and positive controlled airspace</p>

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
<u>Group 3</u> Two-way communications Two systems—air taxis VOR or Automatic Direction Finder (ADF) or RNAV	1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL 2. IFR flight 3. Non-TCA controlled airways Group III TCA's Helicopters with 4096 code transponders...Group II TCA's All helicopters...Group I and II TCA's below 1,000 feet AGL
<u>Group 4</u> Two-way communications Two systems—air taxis 4096 code transponder VOR or RNAV	1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL 2. IFR flight 3. Non-TCA controlled airports Group II TCA's Helicopters...Group I TCA's below 1,000 feet AGL
<u>Group 5</u> 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Uncontrolled airports Group III TCA's

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
<u>Group 6</u> Two-way communications 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters...Group I TCA's
<u>Group 7</u> Two-way communications Two systems—air taxis 4096 code transponder Altitude encoding equipment VOR	1. Non-positive controlled airspace VOR airways 2. IFR flight 3. Group I TCA's
<u>Group 8</u> Two-way communications Two systems—air taxis 4096 code transponder Altitude encoding equipment VOR } or RNAV DME	1. Positive controlled airspace Jet routes RNAV...RNAV routes 2. IFR flight 3. Group I TCA's

TABLE 1-5. NON-HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
<u>Group 1</u> Localizer	Partial use of airport ILS
<u>Group 2</u> Localizer Marker Beacon	Partial use of airport ILS
<u>Group 3</u> Localizer Marker Beacon Glide Slope	Full use of airport ILS
<u>Group 4</u> ILS Radar Altimeter	Landing approach in Category III ¹ weather conditions at airports with Category III equipment
<u>Group 5</u> Long Range RNAV	Area navigation over long distances and large bodies of water
<u>Group 6</u> Radar Altimeter	Determination of altitude above level of terrain
<u>Group 7</u> Microwave Landing System (MLS)	More accurate and flexible landing approaches, especially at airports with mountains and large buildings nearby
<u>Group 8</u> ILS MLS	Backup landing systems
<u>Group 9</u> Long Range RNAV MLS	Sophisticated navigational and landing capabilities

¹See Appendix D, "Weather Category Definitions," General Aviation Avionics Statistics (1979 Data), (Washington, DC, 1981).

Tables 2-23 through 2-32 show distributions of hierarchical and non-hierarchical capability groups versus aircraft characteristics. These characteristics include: primary use of the aircraft, hours flown during 1982, age of the aircraft, and computed aircraft type. The 13 computed aircraft types listed in Table 1-6 combine the four aircraft characteristics of engine type, number of engines, aircraft type (simple), and number of seats into meaningful combinations for the GA fleet.

Generally, those aircraft in low order CG's have less sophisticated characteristics than those in high order capability groups as follows:

- a. As in prior years, as the hierarchical CG's increase in sophistication, the predominant uses also change from personal, to business and personal, to executive and business (Table 2-23).
- b. As non-hierarchical CG's increase in sophistication, the predominant primary uses of aircraft change from personal, to business, to business and executive. For example, executive aircraft alone compose 34 percent of the aircraft reporting both a microwave landing system and a complete ILS and about 46 percent of the aircraft reporting a complete ILS and radar altimeter, yet executive aircraft compose only 6.4 percent of the fleet (Table 2-28).
- c. In the case of both hierarchical and non-hierarchical capability groups, aircraft containing more avionics equipment and capabilities are flown more hours on the average than those with smaller investments in avionics equipment (Tables 2-24 and 2-29).
- d. Aircraft in the more sophisticated groups contain newer aircraft on the average than less sophisticated CG's (Tables 2-25 and 2-30).
- e. Computed aircraft type increases in sophistication as the level of avionics increases. (Tables 2-26 and 2-31).

1.4.7 Other Results

Additional results to those discussed above are found in the tables in Section 2. Estimates of total hours, mean hours, lifetime airframe hours, and number of active aircraft for over 200 SDR manufacturer/model groups of general aviation aircraft are found in Tables 2-5, 2-11, and 2-19. Appendix D contains definitions of these groups. The report also includes a table on mean hours and number of active engines for 81 different manufacturer/model groups of engines. Appendix E contains definitions of these groups.

TABLE 1-6. COMPUTED AIRCRAFT TYPE

TYPE	DESCRIPTION
1.	Fixed wing single engine piston 1-3 seats
2.	Fixed wing single engine piston 4+ seats
3.	Fixed wing two engine piston 1-6 seats
4.	Fixed wing two engine piston 7+ seats
5.	Fixed wing piston other
6.	Fixed wing two engine turboprop 1-12 seats
7.	Fixed wing two engine turboprop 13+ seats
8.	Fixed wing turboprop other
9.	Fixed wing two engine turbojet
10.	Fixed wing turbojet other
11.	Rotorcraft piston
12.	Rotorcraft turbine
13.	Other aircraft

2. TABLES OF RESULTS

TABLE 2 - 1

**GENERAL AVIATION TOTAL HOURS FLOWN
BY
TYPE OF AIRCRAFT
1982**

PAGE 1 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING									
FIXED WING - PISTON									
1 ENG: 1-3 SEATS	82090	57670	910	8324678	373691	4.5	145.5	6.1	4.2
1 ENG: 4+ SEATS	118008	106503	687	15934448	472287	3.0	151.0	4.5	3.0
1 ENGINE: TOTAL	200098	164173	1140	24259126	602245	2.5	149.1	3.6	2.4
2 ENG: 1-6 SEATS	18469	16381	303	3038903	176564	5.6	187.2	10.5	5.6
2 ENG: 7+ SEATS	10061	8501	168	2617210	196999	7.5	317.3	23.8	7.5
2 ENGINE: TOTAL	28530	24882	346	5657113	264543	4.7	230.6	10.6	4.6
PISTON: OTHER	341	140	24	33395	9549	28.6	246.8	39.2	15.9
PISTON: TOTAL	228969	189195	1192	29949634	657855	2.2	159.8	3.4	2.1
FIXED WING - TURBOPROP									
2 ENG: 1-12 SEATS	4490	4427	45	1575932	115710	7.3	355.8	25.8	7.3
2 ENG: 13+ SEATS	643	610	28	520393	84280	16.2	852.5	130.1	15.3
2 ENGINE: TOTAL	5133	5037	53	2096325	143150	6.8	394.4	25.9	6.6
TURBOPROP: OTHER	205	149	28	71217	20024	28.1	473.0	84.1	17.8
TURBOPROP: TOTAL	5338	5186	80	2167542	144544	6.7	396.3	25.4	6.4

TABLE 2 - 1
GENERAL AVIATION TOTAL HOURS FLOWN
BY
TYPE OF AIRCRAFT
1982

PAGE 2 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING - TURBOJET									
2 ENGINE TURBOJET	3475	3309	84	1346860	98437	7.3	407.0	27.7	6.8
TURBOJET: OTHER	889	687	73	263976	46185	17.5	385.3	52.1	13.5
TURBOJET: TOTAL	4364	3996	112	1610836	108733	6.8	404.0	24.9	6.2
FIXED WING: TOTAL	238671	198377	1199	33728012	682268	2.0	170.6	3.4	2.0
ROTORCRAFT									
PISTON	5279	2419	178	579057	57661	10.0	236.8	18.9	8.0
TURBINE	4432	3749	140	1771174	144638	8.2	474.2	33.5	7.1
ROTORCRAFT: TOTAL	9711	6169	226	2350231	155708	6.6	383.2	21.8	5.7
OTHER	6985	5233	211	378700	40432	10.7	72.4	7.2	9.9
TOTAL	255367	209779	1238	38456943	700977	1.9	174.0	3.3	1.9

TABLE 2 - 2
 GENERAL AVIATION TOTAL HOURS FLOWN
 BY
 STATE OF BASED AIRCRAFT
 1982

PAGE 1 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALABAMA	2628	409	482081	115142
ALASKA	6924	639	1254965	194510
ARIZONA	4679	526	795922	126915
ARKANSAS	2994	428	540620	111783
CALIFORNIA	27848	1210	4507097	338484
COLORADO	4982	543	991768	157576
CONNECTICUT	1798	326	395829	98755
DELAWARE	586	183	105220	42182
DC	152	103	46235	33232
FLORIDA	12297	855	2784783	347125
GEORGIA	4997	549	914340	138464
HAWAII	426	158	86169	34428
IDAHO	2376	390	240781	66736
ILLINOIS	7983	684	1358051	239534
INDIANA	3074	425	467946	99881
IOWA	3455	459	550358	118448
KANSAS	3534	463	518701	100826
KENTUCKY	1525	301	466124	230531
LOUISIANA	3742	477	1338612	239921
MAINE	1109	258	148407	56525
MARYLAND	2646	404	448155	100056

TABLE 2 - 2
 GENERAL AVIATION TOTAL HOURS FLOWN
 BY
 STATE OF BASED AIRCRAFT
 1982

PAGE 2 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR HOURS
MASSACHUSETTS	2959	433	494631	116732
MICHIGAN	7065	636	1042263	158662
MINNESOTA	4493	523	782795	140933
MISSISSIPPI	2252	375	373273	88182
MISSOURI	4540	532	663160	115779
MONTANA	2193	381	290543	72757
NEBRASKA	1539	306	274925	82405
NEVADA	2018	344	519288	155151
NEW HAMPSHIRE	1197	275	248764	87596
NEW JERSEY	3858	486	880994	182137
NEW MEXICO	2323	373	363421	80071
NEW YORK	6118	604	1011037	155525
NORTH CAROLINA	3740	478	683804	139351
NORTH DAKOTA	1705	327	349529	91065
OHIO	8162	698	1251601	176872
OKLAHOMA	5440	571	694295	108337
OREGON	4789	554	486499	80881
PENNSYLVANIA	6313	611	1298370	245453
RHODE ISLAND	266	134	46570	27080
SOUTH CAROLINA	1763	339	265912	68454

TABLE 2 - 2
 GENERAL AVIATION TOTAL HOURS FLOWN
 BY
 STATE OF BASED AIRCRAFT
 1982

PAGE 3 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
SOUTH DAKOTA	1360	285	143869	39585
TENNESSEE	2924	415	543003	108113
TEXAS	20000	1055	3268007	276719
UTAH	1196	273	204002	60088
VERMONT	532	181	56913	23309
VIRGINIA	2327	374	317093	78684
WASHINGTON	5532	587	877338	147102
WEST VIRGINIA	1227	283	154814	48315
WISCONSIN	3983	493	615821	134394
WYOMING	1462	297	213370	71489
PUERTO RICO	251	127	52284	29801
OTHER U. S. TERRITORIES	72	67	22668	23377
FOREIGN	778	228	359406	154454
TOTAL	209779	1238	38456943	700977

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 3
 GENERAL AVIATION TOTAL HOURS FLOWN
 BY
 REGION OF BASED AIRCRAFT
 1982

REGION	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALASKAN	6924	639	1254964	194509
CENTRAL	13069	878	2010541	205028
EASTERN	23226	1137	4262336	353901
EUROPEAN OFFICE	261	120	28486	14033
GREAT LAKES	37825	1397	6018034	394904
NEW ENGLAND	7861	689	1392314	183654
NORTHWEST MT.	22530	1126	3296718	257619
SOUTHERN	32604	1324	6700125	459140
SOUTHWESTERN	34690	1347	6419610	406306
WESTERN-PACIFIC	35146	1338	5990741	393311
TOTAL	209779	1238	36456943	700977

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 4
 GENERAL AVIATION TOTAL HOURS FLOWN
 BY
 AIRCRAFT TYPE AND PRIMARY USE
 1982

PAGE 1 OF 4

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSO-NAL	INSTRU-C-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS												
EST. TOT. HOURS	4719	264583	2426487	3089287	1587753	207079	177135	135	30835	74682	528083	8324678
% STD. ERROR	69.1	15.0	4.8	10.4	10.8	23.7	33.3	92.7	69.9	31.8	21.2	4.5
2-8												
1 ENG: 4+ SEATS												
EST. TOT. HOURS	558494	4698276	5132457	1413022	186904	649504	101427	125769	852273	61513	2268578	15934448
% STD. ERROR	21.4	5.2	5.6	15.1	55.8	25.3	38.6	62.7	18.4	35.5	11.2	3.0
1 ENGINE: TOTAL												
EST. TOT. HOURS	563842	4950256	7552369	4507382	1737376	858509	278730	127214	882639	135963	2796676	24259126
% STD. ERROR	21.2	5.0	4.1	8.6	10.9	19.3	25.4	55.6	17.9	23.6	9.9	2.5
2 ENG: 1-6 SEATS												
EST. TOT. HOURS	732930	1138230	331352	158996	28791	38931	730	0	550259	37423	41981	3039903
% STD. ERROR	16.7	9.2	16.0	60.3	75.5	56.1	53.2	0.0	21.4	40.0	52.3	5.8

TABLE 2 - 4

**GENERAL AVIATION TOTAL HOURS FLOWN
BY
AIRCRAFT TYPE AND PRIMARY USE
1982**

PAGE 2 OF 4

AIRCRAFT TYPE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRU-CTIONAL	AERIAL APL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
2 ENG: 7+ SEATS												
EST. TOT. HOURS	86435.1	471342	71112	24315	8885	31610	28743	535981	564515	66725	10575	2617210
% STD. ERROR	12.5	17.7	30.0	57.9	17.4	55.4	33.7	33.2	18.4	42.4	68.8	7.5
2 ENGINE: TOTAL												
EST. TOT. HOURS	1596558	1605233	402401	183911	40803	70492	30243	535981	1112671	102694	52681	5657113
% STD. ERROR	10.3	8.2	14.2	52.9	54.2	39.8	30.3	33.2	14.2	30.6	42.9	4.7
PISTON: OTHER												
EST. TOT. HOURS	286	72	39	0	3049	287	468	13990	182	4033	11000	33395
% STD. ERROR	134.9	162.9	139.3	0.0	44.0	105.7	162.9	55.2	89.2	36.9	38.5	28.6
PISTON: TOTAL												
EST. TOT. HOURS	2163227	6563406	7954371	4691665	1789622	930425	306674	675204	1995757	241444	2859728	29949634
% STD. ERROR	9.5	4.3	3.9	8.5	10.6	18.1	23.8	28.3	11.3	18.6	9.7	2.2
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS												
EST. TOT. HOURS	1061331	151317	3511	0	0	10857	0	91361	222356	20808	15620	1575932
% STD. ERROR	8.7	33.8	115.3	0.0	0.0	128.3	0.0	84.3	31.2	59.4	107.0	7.3
2 ENG: 13+ SEATS												
EST. TOT. HOURS	124122	1081	0	0	0	0	0	316798	36142	42250	0	520393
% STD. ERROR	28.9	424.4	0.0	0.0	0.0	0.0	0.0	32.1	87.7	64.3	0.0	16.2

TABLE 2 - 4
GENERAL AVIATION TOTAL HOURS FLOWN
BY
AIRCRAFT TYPE AND PRIMARY USE
1982

PAGE 3 OF 4

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
2 ENGINE: TOTAL												
EST. TOT. HOURS	1176650	152144	3511	0	0	10657	0	398168	251609	52040	15620	2096325
% STD. ERROR	8.3	33.7	115.3	0.0	0.0	128.3	0.0	33.7	29.5	42.0	107.0	6.8
TURBOPROP: OTHER												
EST. TOT. HOURS	2120	0	85	0	62527	321	1734	481	2592	1135	0	71217
% STD. ERROR	191.0	0.0	295.1	0.0	26.1	295.1	183.8	31.5	13.3	93.8	0.0	28.1
TURBOPROP: TOTAL												
EST. TOT. HOURS	1178724	152144	3660	0	62527	11214	1734	397740	254217	53633	15620	2167542
% STD. ERROR	8.3	33.7	108.4	0.0	26.1	118.9	183.8	33.5	29.2	40.1	107.0	6.7
FIXED WING - TURBOJET												
2 ENGINE TURBOJET												
EST. TOT. HOURS	971543	80639	18512	0	0	0	0	10700	228342	37124	0	1346860
% STD. ERROR	9.9	50.1	97.9	0.0	0.0	0.0	0.0	137.5	38.0	85.9	0.0	7.3
TURBOJET: OTHER												
EST. TOT. HOURS	226758	4232	0	0	0	0	0	23548	0	9438	0	263976
% STD. ERROR	17.7	233.1	0.0	0.0	0.0	0.0	0.0	104.7	0.0	151.4	0.0	17.5
TURBOJET: TOTAL												
EST. TOT. HOURS	1198247	84594	18512	0	0	0	0	33628	228342	47595	0	1610836
% STD. ERROR	8.7	49.0	97.9	0.0	0.0	0.0	0.0	83.3	38.0	74.7	0.0	6.8

TABLE 2 - 4

**GENERAL AVIATION TOTAL HOURS FLOWN
BY
AIRCRAFT TYPE AND PRIMARY USE
1982**

PAGE 4 OF 4

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSO-NAL	INSTRU-C-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
FIXED WING: TOTAL												
EST. TOT. HOURS	4530785	6802477	7976705	4691665	1844909	941610	308335	1086012	2478246	339164	2875469	33728012
% STD. ERROR	5.8	4.2	3.9	8.5	10.4	17.9	23.8	21.6	10.2	17.4	9.7	2.0
ROTORCRAFT												
PISTON												
EST. TOT. HOURS	24728	26029	16135	92852	169382	129394	14224	0	9072	93082	824	579057
% STD. ERROR	34.5	41.5	33.3	28.8	18.2	28.0	58.3	0.0	49.1	34.7	155.6	10.0
TURBINE												
EST. TOT. HOURS	430956	32379	8859	32773	26790	181828	133509	0	709381	188538	32299	1771174
% STD. ERROR	21.9	50.0	55.3	65.8	41.7	35.7	42.3	0.0	18.0	30.4	124.2	8.2
ROTORCRAFT: TOTAL												
EST. TOT. HOURS	455683	58798	25084	125411	196087	313131	147917	0	721241	280941	33786	2350231
% STD. ERROR	20.2	31.3	27.8	24.2	16.7	23.3	37.3	0.0	17.6	23.8	113.2	6.6
OTHER												
EST. TOT. HOURS	627	536	178766	101470	0	6345	14109	0	2088	25126	50759	378700
% STD. ERROR	90.1	40.6	11.2	32.9	0.0	66.3	52.6	0.0	86.7	34.7	33.4	10.7
TOTAL												
EST. TOT. HOURS	4983213	6861454	8182195	4924049	2043005	1255775	467294	1086012	3187468	637975	2961319	36456943
% STD. ERROR	3.8	3.2	3.5	5.8	6.0	10.8	13.6	12.0	5.6	12.4	5.9	1.9

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	PAGE 1 OF 11
OTHER 01	12516	368521	59929	16.3	60.3	8.9	14.7	
OTHER 02	2493	254585	69320	27.2	121.3	31.7	26.2	
OTHER 03	1183	114442	23034	20.1	126.8	21.1	16.7	
OTHER 04	631	61711	3473	55.7	175.4	80.8	46.1	
OTHER 05	61	9781	4043	41.3	438.2	137.0	31.3	
OTHER 06	1460	512025	112578	22.0	366.1	79.3	21.7	
OTHER 07	354	282662	75806	26.8	878.0	220.0	25.1	
OTHER 08	116	5969	3378	56.6	126.1	44.6	35.4	
OTHER 09	1601	574622	88501	15.4	405.0	57.0	14.1	
OTHER 10	623	106704	48370	45.3	301.7	106.9	35.4	
OTHER 11	1728	16217	6729	41.5	45.2	13.3	29.4	
OTHER 12	1095	500024	79522	15.9	514.6	71.0	13.8	
OTHER 13	3228	121492	18523	15.2	57.9	7.4	12.7	
AIRPTSA	240	11721	4387	37.4	66.3	18.3	27.6	
AIRTRCAT300	350	109379	15626	14.3	312.5	44.6	14.3	
AMD FALC20	216	82888	7928	9.6	383.7	36.7	9.6	
AMD FALC50	82	38841	3051	7.9	473.7	37.2	7.9	
ARCTICS1A	91	1521	213	14.0	41.8	4.5	10.7	
ARONCA15	199	8974	3525	39.3	67.8	15.8	23.3	
ARONCA65	138	3522	1532	43.5	49.3	3.3	6.6	
ARONCAC3	58	110	29	26.2	14.0	2.4	17.2	

NOTE: SEE PAGE 2-36 FOR CODING

TABLE 2 - 5
GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	PAGE 2 OF 11
AVIAN FALCON	26	836	109	13.1	36.0	4.3	12.0	
AYRES S2	839	244677	40536	16.6	361.9	46.4	12.8	
AYRES S2T	60	36115	6348	17.6	639.3	67.7	10.6	
BALMKSFIR FFY	927	46349	10148	21.9	54.1	11.5	21.2	
BEAGLEB206	31	2001	477	23.8	74.1	16.5	22.3	
BEECH 100	269	98789	14849	15.0	367.2	55.2	15.0	
BEECH 17	185	3626	518	14.2	47.4	5.1	10.7	
BEECH 18	896	118426	14454	12.2	254.3	27.8	10.9	
BEECH 200	737	292589	39596	13.5	397.0	53.7	13.5	
BEECH 23	2819	412148	70717	17.2	155.8	26.3	16.9	
BEECH 33	1636	172762	23917	13.8	112.7	14.7	13.0	
BEECH 35	6770	646818	45074	7.0	106.1	6.7	6.3	
BEECH 36	1776	365227	46145	12.6	223.7	25.5	11.4	
BEECH 45	290	30774	13221	43.0	132.0	46.9	35.5	
BEECH 50	338	37870	13219	34.9	170.9	33.9	19.9	
BEECH 55	2238	381721	59073	15.5	189.9	27.5	14.5	
BEECH 58	1361	292684	42863	14.6	232.1	31.1	13.4	
BEECH 60	418	81682	20121	24.6	196.3	48.0	24.4	
BEECH 65	139	38133	12251	32.1	277.7	88.8	32.0	
BEECH 80	192	33532	9081	27.1	243.8	61.0	25.0	
BEECH 90	867	224706	33417	14.9	336.9	50.1	14.9	

TABLE 2 - 5
GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BEECH 95	459	63048	15176	24.1	137.4	33.1	24.1
BELL 204	153	16976	1368	8.1	160.5	11.4	7.1
BELL 206	2114	958520	103272	10.8	495.3	49.9	10.1
BELL 47	1446	197618	36444	18.4	242.7	33.4	13.8
BLANCA11	896	8263	5849	70.8	49.1	6.6	13.4
BLANCA1413	263	2626	1309	49.8	43.8	6.6	15.1
BLANCA1419	280	7379	2479	33.6	47.8	13.0	27.2
BLANCA17	1034	83405	8994	10.8	82.6	8.7	10.5
BLANCA7	5714	313438	25999	8.3	80.8	6.2	7.6
BLANCA8	711	92126	11615	12.6	133.9	16.6	12.4
BNORM BN2	118	100537	22274	22.2	884.6	174.6	19.7
BOEING75	1887	93732	32749	34.9	107.8	30.7	28.5
BOEINGB17	15	207	122	58.6	73.0	0.0	0.0
BOEINGC97							
CAMRONMODEL0	136	4948	491	9.9	40.4	3.7	9.2
CESSNA120	860	35390	3566	10.1	55.1	5.1	9.3
CESSNA140	2307	77853	10403	13.4	54.5	5.6	10.4
CESSNA150	19509	3627478	247938	6.8	208.5	13.7	6.5
CESSNA170	2397	162295	38654	23.8	87.9	19.6	22.3
CESSNA172	24709	4374922	269497	6.2	186.8	11.3	6.1
CESSNA175	1297	60093	7662	12.8	54.5	6.5	11.8

TABLE 2 - 5
GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CESSNA177	2895	284920	38565	13.5	106.1	13.6	12.9
CESSNA180	2682	445285	158558	35.6	185.6	65.4	35.2
CESSNA182	13600	1716977	120352	7.0	133.7	9.1	6.8
CESSNA185	1538	413818	100592	24.3	315.0	69.7	22.1
CESSNA188	1833	455387	61669	13.5	276.7	33.3	12.0
CESSNA195	483	16029	3540	22.1	56.2	10.0	17.8
CESSNA205	192	12352	9042	73.2	93.2	61.0	65.4
CESSNA206	2976	600583	100628	16.8	219.1	35.5	16.2
CESSNA207	394	199438	49598	24.9	516.5	124.7	24.1
CESSNA210	6157	987228	92048	9.3	169.6	15.3	9.0
CESSNA305	255	25907	7003	27.0	153.5	27.7	18.0
CESSNA310	3225	468202	54844	11.7	163.5	17.7	10.8
CESSNA320	335	30772	8694	28.3	111.6	25.7	23.0
CESSNA337	1244	130572	26029	19.9	112.1	21.5	19.2
CESSNA340	929	278132	44384	16.0	309.2	47.1	15.2
CESSNA401	249	48362	18422	38.1	230.5	79.9	34.7
CESSNA402	737	356599	106578	29.9	497.5	146.8	29.5
CESSNA411	173	19834	2795	14.1	146.4	17.2	11.8
CESSNA414	773	192313	39169	20.4	281.3	51.0	18.1
CESSNA421	1301	296467	50044	16.9	241.9	38.9	16.1
CESSNA500	501	192273	41897	21.8	383.8	83.6	21.8

MANUFACTURER/ MODEL GROUP		GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CHILD S1		199	8035	2757	45.7	30.3	13.9	45.7
COMMTH185		107	1165	326	28.0	36.7	7.6	20.8
CONAERLA4		450	56828	5647	10.0	125.8	12.5	10.0
CURT1SC46		45	4460	1714	38.4	321.1	58.0	18.1
CURTISTRVAIR		183	2570	469	18.2	63.4	9.3	14.6
CVAC 240		45	244	133	54.5	50.0	0.0	0.0
CVAC BT13		95	345	314	91.0	16.8	4.0	23.9
CVAC P4Y		8	822	93	11.3	144.6	10.8	7.5
DHAV DHC1		86	2120	611	28.8	32.1	8.4	26.3
DHAV DHC2		306	58458	8766	12.0	295.8	31.0	10.5
DHAV DHC6		79	83203	28576	31.9	1104.5	327.0	29.6
DHAVXXDH82		83	2141	335	15.6	40.9	5.2	12.8
DOUG A26		49	511	188	36.7	27.0	7.7	28.3
DOUG DC3		429	56862	12711	22.4	265.4	48.2	18.2
DOUG DC4		83	3250	2753	84.7	135.0	42.1	31.2
DOUG DC6		104	2348	1615	68.8	47.9	30.0	62.8
DOUG DC7		41	11991	4290	35.8	379.8	125.5	33.0
EMAIR MA1		22	3290	642	19.5	199.4	35.8	17.9
EMB 110		73	118821	15699	13.2	1627.7	215.1	13.2
ENSTRMF28		438	74494	24227	32.5	218.5	51.9	23.7
FLEET 168		24	49	41	84.1	20.0	5.2	26.0

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
							PAGE
FRCHLD24	289	2201	389	17.6	33.9	3.3	9.8
FRCHLD C119	34	1659	168	10.2	96.9	5.1	5.2
FRCHLD FH1100	72	3458	941	27.2	94.5	22.5	23.8
FRCHLD M62	223	3026	565	18.7	37.1	4.3	11.6
GLASFLH301	119	6079	594	9.8	64.9	5.2	8.1
GRTLKS2T1	181	13016	6560	50.4	99.0	35.5	35.9
GRUMANG21	44	2578	1012	39.3	159.0	16.9	10.6
GRUMANTBM	35	519	97	18.8	27.5	3.8	14.0
GRUMAVAA1	577	69086	28132	40.7	120.1	48.8	40.7
GRUMAVAA5	320	33942	5346	15.7	106.1	16.7	15.7
GRUMAVG164	664	176130	37190	21.1	369.4	45.5	12.3
GULSTM112	701	59056	14607	24.7	116.6	19.3	16.5
GULSTM500	323	206159	45985	22.3	679.6	121.0	17.8
GULSTM880	335	23947	11993	50.1	97.5	45.9	47.1
GULSTM890TP	428	171608	18018	10.5	401.0	42.1	10.5
GULSTM8A1	599	39873	10454	26.2	71.2	18.0	25.2
GULSTM8A5	1350	229485	52586	22.9	180.9	40.4	22.3
GULSTM8159	167	78310	17638	22.5	468.9	105.6	22.5
GULSTM8159	137	74534	9954	13.4	544.0	72.7	13.4
GULSTM844	80	7420	1086	14.4	136.0	17.0	12.5
HELI10 H391	23	820	171	20.9	54.1	9.7	17.9

TABLE 2 - 5
GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	PAGE 7 OF 11
HELIOS H395	21	1477	287	19.4	75.5	13.4	17.8	
HILLERUH12	640	66395	17359	26.1	213.1	41.9	19.6	
HUGHES269	687	172795	31339	18.1	367.0	59.3	16.2	
HUGHES369	631	283458	66682	23.5	577.9	101.5	17.6	
HMKSLYDH104	33	1330	638	47.9	214.4	53.9	25.2	
HMKSLYDH114	14	0	0	0.0	0.0	0.0	0.0	
HYNES B2	125	2220	1845	83.1	53.0	31.0	58.5	
INTRCP200	30	2438	196	8.0	89.6	6.3	7.0	
ISRAEL1124	152	69431	8975	12.9	456.8	59.0	12.9	
JBMSTRDGA15	80	1166	177	15.2	46.2	5.0	10.8	
LAIKFN10	38	310	81	26.2	24.7	5.4	22.1	
LEAR 24	167	62134	12282	19.8	372.1	73.5	19.8	
LEAR 35	330	122966	14059	11.4	372.6	42.6	11.4	
LET L13	165	17985	3882	21.6	117.5	24.8	21.1	
LKHEED1329	136	51974	11379	21.9	382.2	83.7	21.9	
LKHEED18	70	2704	1888	69.8	168.2	3.3	2.0	
LKHEEDT33	48	0	0	0.0	0.0	0.0	0.0	
LUSCOM8	2122	79890	18239	22.8	57.3	12.6	22.1	
MARTIN404	29	402	587	141.1	200.0	0.0	0.0	
MAULE M4	265	14632	1737	11.9	66.6	7.3	11.0	
MAULE M5	410	39084	6938	17.8	95.3	16.9	17.8	

TABLE 2 - 5
GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
MCCULHJ2	35	316	130	41.2	41.7	13.3	32.0
MCLISHFUNKB	137	2983	250	8.4	45.5	3.1	6.7
MNCOUPE90	69	442	166	37.5	28.2	5.4	19.0
MOONEYM20	5772	701781	69060	9.8	130.8	12.3	9.4
MTSBSIMU2	364	114697	17817	15.5	317.0	48.7	15.4
MULTECD16	45	1721	235	13.6	55.1	6.2	11.3
NAMER F51	140	4820	481	10.0	57.9	4.3	7.5
NAMER NA260	63	1679	195	11.6	48.9	3.9	8.0
NAMER T6	495	16928	3075	18.2	50.7	7.7	15.1
NAVIONNAVION	1198	55832	3711	6.6	64.7	3.6	5.6
NORD SV4	45	1505	391	26.0	45.6	11.3	24.3
NORWST65	57	2311	528	22.9	92.6	20.0	21.6
ORLHELH19	36	226	776	343.8	190.0	0.0	0.0
PICARDAX6	156	2902	661	22.8	28.2	5.2	18.4
PIPER 600	496	100397	39872	39.7	236.6	88.0	37.2
PIPER J2	66	403	76	19.0	20.5	2.7	13.4
PIPER J3	4135	137344	35855	26.1	65.9	15.3	23.3
PIPER J4	234	4880	932	19.1	55.9	9.2	16.4
PIPER J5	342	10504	3313	31.5	69.5	14.0	20.1
PIPER PA12	1284	58822	17808	30.3	56.3	15.8	28.1
PIPER PA16	352	13992	5976	42.7	51.2	18.7	36.6

TABLE 2 - 5
GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
PIPER PA17	106	2994	635	21.2	51.7	8.2	15.8
PIPER PA18	3431	313389	45038	14.4	122.7	14.7	12.0
PIPER PA20	453	21962	367	16.7	78.2	12.2	15.6
PIPER PA22	4795	194761	27211	14.0	59.2	6.7	11.4
PIPER PA23	3487	563050	76855	13.6	174.5	23.0	13.2
PIPER PA24	3170	294382	45914	15.6	101.0	15.1	15.0
PIPER PA25	1411	273420	50298	18.4	249.6	35.7	14.3
PIPER PA28	22150	3293241	193852	5.9	156.9	9.1	5.8
PIPER PA30	1248	144395	19481	13.5	127.9	15.1	11.8
PIPER PA31	2090	753792	102529	13.6	415.9	57.2	13.8
PIPER PA31T	545	129593	23309	18.0	237.8	42.8	18.0
PIPER PA32	3985	529110	63042	11.9	136.0	16.0	11.7
PIPER PA34	2140	531423	55014	10.4	248.3	25.7	10.4
PIPER PA36	401	87604	18214	20.8	276.0	46.4	16.8
PIPER PA38	1584	651241	148048	22.7	416.7	94.7	22.7
PIPER PA44	345	142288	72860	51.2	412.4	211.2	51.2
PROPLUT200	66	4855	716	14.7	91.5	12.2	13.3
RAVEN S50	94	921	119	13.0	22.2	2.2	9.9
RAVEN S55	664	24293	4299	17.7	39.7	6.4	16.2
RK WELLNA265	341	145192	24494	16.9	465.2	62.2	13.4
ROBSINR22	169	44395	8481	19.1	281.0	51.9	18.5

TABLE 2 - 5
GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
RYAN ST3	158	2824	849	30.1	38.0	7.3	19.3
RYAN STA	32	215	81	37.9	24.5	4.2	17.2
SCHLERKA6	74	2836	335	11.8	42.4	4.6	10.8
SCWZERG1B4	891	188509	55307	29.3	287.0	70.2	24.4
SCWZERSG1	756	38670	9275	24.0	71.7	14.5	20.1
SCWZERSG2	576	103999	23459	22.6	230.3	43.3	18.8
SEMCO CLNGER	26	858	91	13.9	31.1	3.9	12.6
SKRSKY555	79	6581	1941	29.5	281.2	52.4	18.6
SKRSKY558	55	1938	596	30.8	141.0	17.0	12.0
SMITH 600	213	26649	5834	21.9	153.7	2.5	1.6
SNIAS 350	228	61789	17714	28.7	315.9	83.3	26.4
STNSON10	162	1502	277	18.4	28.7	3.7	12.8
STNSON15	127	2673	377	14.1	53.7	5.2	9.7
STNSONV77	101	1197	296	24.7	32.8	5.0	15.4
STOLAMRC3	214	3040	424	13.9	40.3	4.6	11.4
T CRAFTA	30	236	68	27.8	16.6	3.4	20.3
TCRAFTBC	1797	31794	8421	26.5	44.0	9.3	21.0
TCRAFTBL	225	5038	708	14.1	46.7	5.1	10.8
TRYTEK65	341	4346	1307	30.1	27.7	7.5	27.0
UNIVACG1	646	30183	9237	30.6	71.5	17.4	24.3
UNIVAR108	1971	46304	7995	17.3	44.7	6.0	13.5

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
UNIVAR415	2350	85009	15203	17.9	55.6	7.1	12.8
VARGA 2150	33	1354	199	14.7	45.7	5.9	12.9
VARGA G21	99	10984	3130	28.5	129.3	36.2	28.0
WACO AS0	29	156	18	11.7	20.0	1.1	5.3
WACO UPF7	161	411	387	89.3	11.0	0.0	0.0
WACO YK	54	110	23	20.8	10.1	1.2	12.4
WTHRLY201	71	16787	1854	11.0	240.8	25.6	10.6
TOTAL	255367	36456943	700877	1.9	174.0	3.3	1.89

TABLE 2 - 6
 GENERAL AVIATION ACTIVE AIRCRAFT
 BY
 TYPE OF AIRCRAFT
 1982

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	82090	57670	910	1.6	70.3	1.1
1 ENG: 4+ SEATS	118008	106503	687	0.6	90.3	0.6
1 ENGINE: TOTAL	200098	164173	1140	0.7	82.0	0.6
2 ENG: 1-6 SEATS	18469	16381	303	1.8	88.7	1.6
2 ENG: 7+ SEATS	10081	8501	168	2.0	84.5	1.7
2 ENGINE: TOTAL	28530	24882	346	1.4	87.2	1.2
PISTON: OTHER	341	140	24	17.1	41.2	7.0
PISTON: TOTAL	228969	209195	1192	0.6	82.6	0.5
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4490	4427	45	1.0	98.6	1.0
2 ENG: 13+ SEATS	643	610	28	4.6	94.9	4.4
2 ENGINE: TOTAL	5133	5037	53	1.0	98.1	1.0
TURBOPROP: OTHER	205	149	28	18.9	72.7	13.8
TURBOPROP: TOTAL	5338	5186	60	1.2	97.2	1.1

TABLE 2 - 6
 GENERAL AVIATION ACTIVE AIRCRAFT
 BY
 TYPE OF AIRCRAFT
 1982

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3475	3309	84	2.5	95.2	2.4
TURBOJET: OTHER	889	687	73	10.7	77.2	8.3
TURBOJET: TOTAL	4364	3996	112	2.8	91.6	2.6
FIXED WING: TOTAL	238671	198377	1199	0.6	83.1	0.5
ROTORCRAFT						
PISTON	5279	2419	178	7.3	45.8	3.4
TURBINE	4432	3749	140	3.7	84.6	3.2
ROTORCRAFT: TOTAL	9711	6169	226	3.7	63.5	2.3
OTHER	6985	5233	211	4.0	74.9	3.0
TOTAL	255367	209779	1238	0.6	82.1	0.5

TABLE 2 - 7
 GENERAL AVIATION ACTIVE AIRCRAFT
 BY
 STATE OF BASED AIRCRAFT
 1982

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALABAMA	35559	472	2628	409	73.8	15.1
ALASKA	7873	873	6924	639	87.9	11.1
ARIZONA	6113	595	4679	526	76.5	11.4
ARKANSAS	3235	442	2994	428	92.6	18.3
CALIFORNIA	33408	1298	27848	1210	83.4	4.9
COLORADO	5722	574	4982	543	87.1	12.9
CONNECTICUT	2051	344	1798	326	87.7	21.6
DELAWARE	685	192	586	183	85.5	35.8
DC	156	103	152	103	97.2	92.0
FLORIDA	14787	919	12297	855	83.2	7.8
GEORGIA	5555	573	4997	549	90.0	13.6
HAWAII	539	172	426	158	79.0	38.6
IDAH0	2627	403	2376	390	90.5	20.3
ILLINOIS	9277	729	7983	684	86.1	10.0
INDIANA	4056	478	3074	425	75.8	13.8
IOWA	3873	478	3455	459	89.2	16.2
KANSAS	4262	501	3534	463	82.9	14.6
KENTUCKY	1778	324	1525	301	85.8	23.0
LOUISIANA	4094	497	3742	477	91.4	16.1
MAINE	1350	284	1109	258	82.2	25.8
MARYLAND	2984	424	2646	404	88.7	18.5

TABLE 2 - 7
 GENERAL AVIATION ACTIVE AIRCRAFT
 BY
 STATE OF BASED AIRCRAFT
 1982

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MASSACHUSETTS	3481	462	2959	433	85.0	16.8
MICHIGAN	8678	700	7065	636	81.4	9.8
MINNESOTA	5868	581	4493	523	76.6	11.7
MISSISSIPPI	2463	391	2252	375	91.4	21.1
MISSOURI	5314	567	4540	532	85.4	13.5
MONTANA	2455	393	2193	381	89.3	21.1
NEBRASKA	2318	379	1539	306	66.4	17.1
NEVADA	2406	373	2018	344	83.9	19.3
NEW HAMPSHIRE	1483	302	1197	275	80.7	24.8
NEW JERSEY	4826	538	3858	486	79.9	13.4
NEW MEXICO	2503	386	2323	373	92.8	20.7
NEW YORK	7627	666	6118	604	80.2	10.6
NORTH CAROLINA	4493	519	3740	478	83.2	14.3
NORTH DAKOTA	1922	343	1705	327	88.7	23.3
OHIO	9459	732	8162	698	86.3	16.0
OKLAHOMA	6010	596	5440	571	90.5	13.1
OREGON	5981	610	4789	554	80.1	12.4
PENNSYLVANIA	7601	657	6313	611	83.1	10.8
RHODE ISLAND	323	143	266	134	82.5	55.5
SOUTH CAROLINA	1991	356	1766	339	88.7	23.3

TABLE 2 - 7
 GENERAL AVIATION ACTIVE AIRCRAFT
 BY
 STATE OF BASED AIRCRAFT
 1982

PAGE 3 OF 3

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
SOUTH DAKOTA	1586	306	1360	285	85.8	24.4
TENNESSEE	3241	436	2924	415	90.2	17.6
TEXAS	23482	1132	20000	1055	85.2	6.1
UTAH	1334	289	1196	273	89.7	28.2
VERMONT	584	189	532	181	91.0	42.8
VIRGINIA	2955	419	2327	374	78.7	16.9
WASHINGTON	6944	624	5532	567	79.7	10.9
WEST VIRGINIA	1334	291	1227	283	92.0	29.2
WISCONSIN	5529	575	3983	493	72.0	11.6
WYOMING	1613	309	1462	297	90.6	25.3
PUERTO RICO	292	134	251	127	85.9	58.7
OTHER U.S. TERRITORIES	80	68	72	67	90.0	112.5
FOREIGN	1161	268	778	228	67.0	25.0
TOTAL	255367		209779	1238	82.1	0.5

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 8
 GENERAL AVIATION ACTIVE AIRCRAFT
 BY
 REGION OF BASED AIRCRAFT
 1982

REGION	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALASKAN	7873	673	6924	639	87.9	11.1
CENTRAL	15767	949	13069	878	82.9	7.5
EASTERN	28168	1225	23226	1137	82.5	5.4
EUROPEAN OFFICE	527	172	281	120	49.4	27.9
GREAT LAKES	46376	1498	37825	1397	81.6	4.0
NEW ENGLAND	9271	738	7861	689	84.8	10.0
NORTHWEST MT.	26675	1202	22530	1126	84.5	5.7
SOUTHERN	38498	1409	32604	1324	84.7	4.6
SOUTHWESTERN	39520	1418	34690	1347	87.8	4.6
WESTERN-PACIFIC	42647	1440	35146	1338	82.4	4.2
TOTAL	255367	209779	1238	82.1	0.5	

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 8

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1982

AIRCRAFT TYPE	TOTAL	ACTIVE	ACTIVE USE						COMMUTER	AIR	OTHER	RENTAL	INACTIV
			EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	OBS					
FIXED WING - PISTON													
1 ENG: 1-3 SEATS													
EST. NO. ACT.	57670	43	3415	35614	8117	5580	1126	636	34	137	1227	1741	24420
% STD. ERROR	A	D	B	A	A	A	C	C	D	D	C	B	
EST. % ACT.	70.3												
1 ENG: 4+ SEATS													
EST. NO. ACT.	106503	2689	33442	51691	4965	384	1877	551	178	2682	743	7321	11505
% STD. ERROR	A	B	A	B	B	D	B	D	D	B	C	A	
EST. % ACT.	90.3												
1 ENGINE: TOTAL													
EST. NO. ACT.	164173	2731	36857	87305	13083	5943	3003	1187	212	2819	1970	9062	35925
% STD. ERROR	A	B	A	A	A	A	B	C	D	B	B	A	
EST. % ACT.	82.0												
2 ENG: 1-6 SEATS													
EST. NO. ACT.	16381	2565	7533	3024	453	161	178	8	0	1705	516	239	2088
% STD. ERROR	A	B	A	B	D	D	D	D	A	B	D	D	
EST. % ACT.	88.7												

*****	STANDARD ERROR	*	CODE	*
*	-----	*	-----	*
*	GREATERTHAN	LESS THAN	*	*
*	-----	OR	*	*
*	-----	EQUAL TO	*	*
*	-----	-----	*	*
*	0 %	10 %	*	A
*	10 %	20 %	*	*
*	20 %	30 %	*	B
*	30 %	-----	*	C
*	-----	-----	*	*
*	-----	-----	*	D
*****	*****	*****	*****	*****

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1982

PAGE 2 OF 4

AIRCRAFT TYPE	TOTAL	EXECU-TIVE	BUSI-NESS	PERSO-NAL	ACTIVE USE						OTHER	RENTAL	INACTIV
					INSTRUC-TIONAL	AERIAL APPL	OBS	WORK	CARRIER	AIR TAXI			
2 ENG: 7+ SEATS	2816	2315	550	98	107	137	58	477	1405	449	87	1580	
EST. NO. ACT.	A	B	C	D	B	D	D	C	B	C	D		
% STD. ERROR	84.5												
EST. % ACT.													
2 ENGINE: TOTAL	5380	9847	3573	551	267	315	68	477	3109	965	326	3648	
EST. NO. ACT.	A	A	B	C	D	D	D	C	B	C	D		
% STD. ERROR	A	A	B	C	D	D	D	C	B	C	D		
EST. % ACT.	87.2												
PISTON: OTHER	140	4	2	4	0	50	5	2	22	4	34	13	201
EST. NO. ACT.	A	D	D	A	C	D	D	D	D	D	C	D	
% STD. ERROR	A	A	B	C	D	E	F	G	H	I	J	K	
EST. % ACT.	41.2												
PISTON: TOTAL	8115	46707	90882	13634	6261	3324	1258	711	5932	2969	9401	39774	
EST. NO. ACT.	A	A	A	A	A	B	B	C	A	B	A		
% STD. ERROR	A	A	B	C	D	E	F	G	H	I	J		
EST. % ACT.	82.6												
FIXED WING - TURBOPROP													
2 ENG: 1-12 SEATS	3035	569	29	0	0	24	0	80	457	199	34	63	
EST. NO. ACT.	A	C	D	A	A	D	A	D	C	D	C	D	
% STD. ERROR	A	A	B	C	D	E	F	G	H	I	J	K	
EST. % ACT.	98.6												
2 ENG: 13+ SEATS	610	287	2	0	0	0	0	0	214	36	73	0	32
EST. NO. ACT.	A	C	D	A	A	A	A	A	C	D	B	A	
% STD. ERROR	A	A	B	C	D	E	F	G	H	I	J	K	
EST. % ACT.	94.9												

* STANDARD ERROR	* CODE
- - - - -	- - - - -
* GREATER THAN	LESS THAN *
* OR EQUAL TO *	*
* 0 %	10 % * A *
* 10 %	20 % * B *
* 20 %	30 % * C *
* 30 %	* D *

**GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1982**

PAGE 3 OF 4

AIRCRAFT TYPE	TOTAL	EXECU-TIVE	BUSI-NESS	PERSO-NAL	ACTIVE USE			COMMUTER	AIR	OTHER	RENTAL	INACTIV
					INSTRU-CTIONAL	AERIAL APPL	OBS					
2 ENGINE: ACTIVE	5037	3322	570	29	0	0	24	0	493	272	34	95
EST. NO. ACT.	A	A	C	D	A	A	0	A	C	0	D	
% STD. ERROR												
EST. % ACT.	98.1	98.1										
TURBOPROP: OTHER												
EST. NO. ACT.	149	5	0	3	0	101	3	6	3	23	0	56
% STD. ERROR	A	D	A	D	A	C	D	C	B	D	A	
EST. % ACT.	72.7	72.7										
TURBOPROP: TOTAL	5186	3327	570	32	0	101	26	6	296	499	295	151
EST. NO. ACT.	A	A	C	D	A	C	D	D	C	C	D	
% STD. ERROR												
EST. % ACT.	97.2	97.2										
2-31 FIXED WING - TURBOJET												
2 ENGINE TURBOJET	3309	2477	222	47	0	0	0	0	24	393	146	166
EST. NO. ACT.	A	A	D	D	A	A	A	A	D	D	D	
% STD. ERROR												
EST. % ACT.	95.2	95.2										
TURBOJET: OTHER												
EST. NO. ACT.	687	577	8	0	0	0	0	0	39	0	60	202
% STD. ERROR	A	B	D	A	A	A	A	A	D	A	D	
EST. % ACT.	77.2	77.2										
TURBOJET: TOTAL	3996	3054	231	47	0	0	0	0	63	393	207	0
EST. NO. ACT.	A	A	D	D	A	A	A	A	D	D	D	368
% STD. ERROR												
EST. % ACT.	91.6	91.6										

2-31

STANDARD ERROR			CODE
*	- - - - -	*	- - - - -
*	GREATERTHAN	LESS THAN	*
*	- - - - -	*	*
*	EQUAL TO	- - - - -	*
*	- - - - -	*	*
*	0 %	10 %	A
*	10 %	20 %	*
*	20 %	30 %	C
*	30 %	*	D

TABLE 2 - 9
GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1982

PAGE 4 OF 4

AIRCRAFT TYPE	ACTIVE USE										OTHER	RENTAL	INACTIV
	TOTAL	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	OBS	WORK	COMMUTER CARRIER	AIR TAXI			
FIXED WING: TOTAL	198377	14497	47508	90961	13634	6362	3350	1261	1070	8824	3470	9435	40293
EST. NO. ACT.	A	A	A	A	A	A	B	B	B	A	B	A	A
% STD. ERROR													
EST. % ACT.	83.1												
ROTORCRAFT													
PISTON													
EST. NO. ACT.	2419	190	201	356	379	677	352	51	0	43	168	3	2860
% STD. ERROR	A	C	D	C	C	B	C	D	A	D	C	D	
EST. % ACT.	45.8												
TURBINE													
EST. NO. ACT.	3749	1048	151	130	78	116	364	249	0	1184	403	26	681
% STD. ERROR	A	B	D	D	D	D	C	D	A	B	C	D	
EST. % ACT.	84.6												
ROTORCRAFT: TOTAL													
EST. NO. ACT.	6169	1238	352	486	457	793	715	300	0	1227	571	29	3540
% STD. ERROR	A	B	C	C	C	B	B	D	A	B	C	D	
EST. % ACT.	63.5												
OTHER													
EST. NO. ACT.	5233	4	13	3373	618	0	98	172	0	71	505	380	1752
% STD. ERROR	A	D	D	A	C	A	D	D	A	D	C	C	
EST. % ACT.	74.9												
TOTAL													
EST. NO. ACT.	209779	15739	47873	94820	14708	7155	4164	1733	1070	8122	4546	9844	45507
% STD. ERROR	A	A	A	A	A	A	B	B	B	A	A	A	A
EST. % ACT.	82.1												

2-32

***** STANDARD ERROR *****				CODE	*
*	- - - - -	*	*	- - - - -	*
*	GREAT-ER THAN	LESS THAN	*	OR	*
*	THAN	OR	*	EQUAL TO	*
*	- - - - -	*	*	- - - - -	*
*	0 %	10 %	*	A	*
*	10 %	20 %	*	B	*
*	20 %	30 %	*	C	*
*	30 %	40 %	*	D	*

TABLE 2 - 10

**GENERAL AVIATION ACTIVE AIRCRAFT
IFR FLOWN AND TRANSPONDER EQUIPPED
1982**

PAGE 1 OF 2

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C IFR FLOWN	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C IFR FLOWN	ESTIMATED NUMBER OF A/C IFR FLOWN WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	4332	B	7.5	3703	B	85.5
1 ENG: 4+ SEATS	51221	A	48.1	50859	A	99.3
1 ENGINE: TOTAL	55553	A	33.8	54561	A	98.2
2 ENG: 1-6 SEATS	15160	A	92.5	15076	A	99.4
2 ENG: 7+ SEATS	8491	A	99.9	8381	A	98.7
2 ENGINE: TOTAL	23651	A	95.1	23458	A	99.2
PISTON: OTHER	129	C	91.8	129	C	100.0
PISTON: TOTAL	79332	A	41.9	78148	A	98.5
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4427	A	100.0	4427	A	100.0
2 ENG: 13+ SEATS	610	A	100.0	610	A	100.0
2 ENGINE: TOTAL	5037	A	100.0	5037	A	100.0
TURBOPROP: OTHER	27	D	17.8	27	D	100.0
TURBOPROP: TOTAL	5064	A	97.6	5064	A	100.0

*****	*	STANDARD ERROR	*	CODE	*
-----	-	-----	-	-	-
*	*	GREATERTHAN	LESS THAN	*	*
*	*	-----	-----	*	*
*	*	OR	OR	*	*
*	*	EQUAL TO	EQUAL TO	*	*
*	*	-----	-----	*	*
*	*	0 %	10 %	A	*
*	*	10 %	20 %	B	*
*	*	20 %	30 %	C	*
*	*	30 %	*	D	*
*****	*****	*****	*****	*****	*****

TABLE 2 - 10

**GENERAL AVIATION ACTIVE AIRCRAFT
IFR FLOWN AND TRANSPONDER EQUIPPED
1982**

PAGE 2 OF 2

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C IFR FLOWN	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C IFR FLOWN	ESTIMATED NUMBER OF A/C IFR FLOWN WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3309	A	100.0	3309	A	100.0
TURBOJET: OTHER	687	A	100.0	687	A	100.0
TURBOJET: TOTAL	3996	A	100.0	3996	A	100.0
FIXED WING: TOTAL	88392	A	44.6	87564	A	99.1
ROTORCRAFT						
PISTON	10	D	0.4	7	D	72.2
TURBINE	435	D	11.6	435	D	100.0
ROTORCRAFT: TOTAL	445	D	7.2	442	D	99.4
OTHER	7	D	0.1	3	D	43.0
TOTAL	8844	A	42.4	8809	A	99.1

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE	*
*	-----	-----	-----	-----
*	GREATER THAN	LESS THAN	*	*
*	-----	-----	-----	-----
*	0 %	10 %	A	*
*	10 %	20 %	B	*
*	20 %	30 %	C	*
*	30 %	-----	D	*
*	-----	-----	-----	*

TABLE 2 - 11
 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
 MANUFACTURER/MODEL GROUP
 1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
OTHER 01	12516	6110	425	7.0	48.8	3.4
OTHER 02	2493	2099	159	7.6	84.2	6.4
OTHER 03	1183	902	102	11.3	76.3	8.6
OTHER 04	631	352	110	31.3	55.8	17.5
OTHER 05	61	22	6	27.0	36.6	9.9
OTHER 06	1460	1398	53	3.8	95.8	3.6
OTHER 07	354	322	31	9.6	90.9	8.7
OTHER 08	116	47	21	44.2	40.8	18.0
OTHER 09	1601	1419	89	6.2	88.6	5.5
OTHER 10	623	354	100	28.3	56.8	16.1
OTHER 11	1728	358	105	29.3	20.7	6.1
OTHER 12	1095	972	77	7.9	88.7	7.0
OTHER 13	3228	2099	177	8.4	65.0	5.5
AIRPTSA	240	177	45	25.3	73.7	18.6
AIRTRCAT300	350	350	0	0.0	100.0	0.0
AMD FALC20	216	216	0	0.0	100.0	0.0
AMD FALC50	82	82	0	0.0	100.0	0.0
ARCTICS1A	91	36	3	9.0	40.0	3.6
ARONCA15	199	132	42	31.6	66.5	21.0
ARONCA65	138	71	31	43.0	51.8	22.3
ARONCAC3	58	8	2	19.8	13.5	2.7

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT
BELONGING TO MANUFACTURER/MODEL GROUPS OF FEWER THAN
20 AIRCRAFT IN SIZE FOR AIRCRAFT XX WHERE XX STANDS FOR

- 01 FIXED WING PISTON, 1 ENGINE, 1-3 SEATS.
- 02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
- 03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
- 04 FIXED WING PISTON, 2 ENGINE, 7+ SEATS.
- 05 FIXED WING PISTON, OTHER.
- 06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
- 07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
- 08 FIXED WING TURBOPROP, OTHER.
- 09 FIXED WING TURBOJET, 2 ENGINES.
- 10 FIXED WING TURBOJET, OTHER.
- 11 ROTORCRAFT, PISTON.
- 12 ROTORCRAFT, TURBINE.
- 13 OTHER AIRCRAFT.

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

PAGE 2 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
AVIAN FALCON	26	23	1	5.3	89.2	4.7
AYRES S2	839	676	71	10.5	80.6	3.4
AYRES S2T	60	56	8	14.0	94.2	13.2
BALMKSFIREFY	927	856	48	5.6	92.3	5.1
BEAGLEB206	31	27	2	8.4	87.1	7.3
BEECH 100	269	269	0	0.0	100.0	0.0
BEECH 17	185	77	7	9.4	41.4	3.9
BEECH 18	896	459	26	5.8	51.3	2.9
BEECH 200	737	737	0	0.0	100.0	0.0
BEECH 23	2819	2645	83	3.2	93.8	3.0
BEECH 33	1636	1533	73	4.7	93.7	4.4
BEECH 35	6770	6094	180	2.9	90.0	2.7
BEECH 36	1776	1633	89	5.4	91.9	5.0
BEECH 45	290	233	56	24.2	80.4	19.4
BEECH 50	338	222	64	28.7	65.6	18.8
BEECH 55	2238	2010	111	5.5	89.8	5.0
BEECH 58	1361	1261	74	5.9	92.7	5.4
BEECH 60	418	416	13	3.2	99.5	3.2
BEECH 65	139	137	4	3.2	98.8	3.1
BEECH 80	192	138	14	10.4	71.6	7.4
BEECH 90	667	667	0	0.0	100.0	0.0

TABLE 2 - 11
 GENERAL AVIATION ACTIVE AIRCRAFT BY SOR AIRCRAFT
 MANUFACTURER/MODEL GROUP
 1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEECH 95	459	459	0	0.0	100.0	0.0
BELL 204	153	106	4	3.9	69.1	2.7
BELL 206	2114	1935	74	3.8	91.5	3.5
BELL 47	1446	814	100	12.3	56.3	6.9
BLANCA11	896	168	117	69.5	18.8	13.1
BLANCA1413	263	60	28	47.5	22.8	10.8
BLANCA1419	280	154	30	19.7	55.1	10.9
BLANCA17	1034	1009	23	2.3	97.6	2.2
BLANCA7	5714	3881	128	3.3	67.9	2.2
BLANCA8	711	688	15	2.1	96.7	2.1
BNORM BN2	118	114	11	10.1	96.3	9.7
BOEING75	1887	870	178	20.2	46.1	9.3
BOEINGB17	15	3	2	58.6	18.9	11.1
BOEINGC97	15	2	0	17.1	14.2	2.4
CAMRONMODEL0	136	122	5	3.8	90.0	3.4
CESSNA120	860	642	25	3.9	74.7	2.9
CESSNA140	2307	1429	121	8.4	61.9	5.2
CESSNA150	19509	17398	341	2.0	89.2	1.7
CESSNA170	2397	1846	154	8.4	77.0	6.4
CESSNA172	24709	23423	267	1.1	94.8	1.1
CESSNA175	1297	1103	52	4.7	85.0	4.0

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
						PAGE 4 OF 11
CESSNA177	2895	2686	114	4.2	92.8	3.9
CESSNA180	2682	2400	124	5.2	89.5	4.6
CESSNA182	13600	12844	205	1.6	94.4	1.5
CESSNA185	1538	1314	132	10.0	85.4	8.6
CESSNA188	1833	1646	103	6.2	89.8	5.6
CESSNA195	483	285	37	13.0	59.0	7.7
CESSNA205	192	133	44	32.8	69.0	22.7
CESSNA206	2976	2741	116	4.2	92.1	3.9
CESSNA207	394	386	23	6.0	98.0	5.9
CESSNA210	6157	5822	136	2.3	94.6	2.2
CESSNA305	255	169	34	20.1	66.2	13.3
CESSNA310	3225	2864	127	4.4	88.8	3.9
CESSNA320	335	276	45	16.4	82.3	13.5
CESSNA337	1244	1165	63	5.4	93.6	5.1
CESSNA340	929	900	43	4.7	96.8	4.6
CESSNA401	249	210	33	15.8	84.3	13.3
CESSNA402	737	717	34	4.7	97.3	4.6
CESSNA411	173	135	11	7.8	78.3	6.1
CESSNA414	773	684	63	9.3	88.4	8.2
CESSNA421	1301	1226	62	5.1	94.2	4.8
CESSNA500	501	501	0	0.0	100.0	0.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

PAGE 5 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CHILD S1	199	199	0	0.0	100.0	0.0
COMWTH185	107	32	6	18.7	29.6	5.5
CONAERLA4	450	450	0	0.0	100.0	0.0
CURTISCA46	45	14	5	33.9	30.9	10.5
CURTISTRAIR	183	40	4	11.1	22.0	2.4
CVAC 240	45	5	3	54.5	10.8	5.9
CVAC BT13	95	20	18	87.9	21.6	18.9
CVAC P4Y	8	6	0	8.5	71.1	6.1
DHAV DHC1	86	66	8	11.7	76.9	9.0
DHAV DHC2	306	191	11	6.0	62.3	3.8
DHAV DHC6	79	75	9	12.0	95.4	11.4
DHAVXXDH82	83	52	5	9.0	63.1	5.7
DOUG A26	49	19	4	23.3	38.6	9.0
DOUG DC3	429	214	28	13.0	49.9	6.5
DOUG DC4	83	24	19	78.7	29.0	22.8
DOUG DC6	104	49	14	28.2	47.2	13.3
DOUG DC7	41	32	4	13.7	77.0	10.6
EMAIR MA1	22	17	1	7.7	75.0	5.7
EMB 110	73	73	0	0.0	100.0	0.0
ENSTRMF28	438	283	55	19.4	64.7	12.5
FLEET 16B	24	2	2	79.9	10.2	8.1

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FRCHLD24	289	65	9	14.3	22.4	3.2
FRCHLDC119	34	17	1	6.7	50.3	4.4
FRCHLDFH1100	72	37	5	13.3	50.8	6.7
FRCHLDM62	223	82	12	14.6	36.6	5.4
GLASFLH301	119	94	5	5.5	78.8	4.3
GRTLKS2T1	181	131	47	35.4	72.6	25.7
GRUMANG21	44	16	6	37.8	36.9	13.9
GRUMANTBM	35	19	2	12.6	53.9	6.8
GRUMAVAA1	577	575	13	2.2	99.7	2.2
GRUMAVAA5	320	320	0	0.0	100.0	0.0
GRUMAVG164	664	477	82	17.1	71.8	12.3
GULSTM112	701	506	93	18.4	72.2	13.3
GULSTM500	323	303	41	13.4	93.9	12.6
GULSTM680	335	246	42	17.0	73.3	12.5
GULSTM690TP	428	428	0	0.0	100.0	0.0
GULSTMMAA1	599	560	40	7.2	93.5	6.7
GULSTMMAA5	1350	1268	64	5.0	94.0	4.7
GULSTMG1159	167	167	0	0.0	100.0	0.0
GULSTMG159	137	137	0	0.0	100.0	0.0
GULSTMG44	80	55	4	7.1	68.2	4.8
HELIOD H391	23	15	2	10.7	65.9	7.1

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR	PAGE	PAGE 7 OF 11
							1982	1982
HELIO H395	21	20	2	7.9	93.1	7.3		
HILLERUH12	640	312	53	17.2	48.7	8.4		
HUGHES269	667	471	39	8.2	70.6	5.8		
HUGHES369	631	491	77	15.7	77.7	12.2		
HWKSLYDH104	33	6	3	40.8	18.8	7.7		
HWKSLYDH114	14	0	0	0.0	0.0	0.0		
HYNES B2	125	42	25	59.0	33.5	19.8		
INTRCP200	30	27	1	4.0	90.7	3.6		
ISRAEL1124	152	152	0	0.0	100.0	0.0		
JBMSTRDGA15	80	25	3	10.6	31.6	3.3		
LAIKFN10	38	13	2	14.1	33.1	4.7		
LEAR 24	167	167	0	0.0	100.0	0.0		
LEAR 35	330	330	0	0.0	100.0	0.0		
LET L13	165	153	7	4.5	92.7	4.2		
LKHEED1329	136	136	0	0.0	100.0	0.0		
LKHEED18	70	16	11	69.8	23.0	16.0		
LKHEEDT33	48	1	2	138.3	3.0	4.1		
LUSCOM8	2122	1393	82	5.9	65.7	3.9		
MARTIN404	29	2	3	141.0	6.9	9.8		
MAULE M4	265	220	10	4.6	82.9	3.8		
MAULE M5	410	410	0	0.0	100.0	0.0		

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

PAGE 8 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MCCULLAHJ2	35	8	2	25.9	21.7	5.6
MCLISHFUNK8	137	66	3	5.0	47.8	2.4
MNCOUPE90	69	16	5	32.4	22.7	7.3
MOONEYM20	5772	5363	152	2.8	92.9	2.6
MTSBSIMU2	364	362	8	2.3	99.4	2.3
MULTECD16	45	31	2	7.7	69.5	5.3
NAMER F51	140	83	5	6.6	59.4	3.9
NAMER NA260	63	34	3	8.5	54.5	4.6
NAMER T6	495	334	34	10.1	67.5	6.8
NAVIONNAVION	1198	864	31	3.6	72.1	2.6
NORD SV4	45	33	3	7.8	73.3	5.7
NORWST65	57	25	2	7.5	43.8	3.3
ORLHELH19	36	1	4	343.8	3.3	11.3
PICARDAX6	156	103	14	13.5	65.9	8.9
PIPER 600	496	424	59	13.9	85.6	11.9
PIPER J2	66	20	3	13.5	29.7	4.0
PIPER J3	4135	2085	246	11.8	50.4	5.9
PIPER J4	234	87	9	9.8	37.3	3.7
PIPER J5	342	151	37	24.3	44.2	10.7
PIPER PA12	1284	1044	118	11.3	81.3	9.2
PIPER PA16	352	273	60	22.0	77.7	17.1

TABLE 2 - 11
 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
 MANUFACTURER/MODEL GROUP
 1982

PAGE 9 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PIPER PA17	106	58	8	14.2	54.6	7.7
PIPER PA18	3431	2554	203	8.0	74.4	5.9
PIPER PA20	453	281	17	5.9	62.0	3.7
PIPER PA22	4795	3341	277	8.3	69.7	5.8
PIPER PA23	3487	3226	115	3.6	92.5	3.3
PIPER PA24	3170	2915	126	4.3	92.0	4.0
PIPER PA25	1411	1095	127	11.6	77.6	9.0
PIPER PA28	22150	21082	257	1.2	95.2	1.2
PIPER PA30	1248	1129	73	6.5	90.4	5.9
PIPER PA31	2090	1862	84	4.5	89.1	4.0
PIPER PA31T	545	545	0	0.0	100.0	0.0
PIPER PA32	3985	3890	81	2.1	97.6	2.0
PIPER PA34	2140	2140	0	0.0	100.0	0.0
PIPER PA36	401	317	39	12.2	79.1	9.7
PIPER PA38	1564	1563	9	0.6	99.9	0.6
PIPER PA44	345	345	0	0.0	100.0	0.0
PROPTJT200	66	53	3	6.3	80.4	5.1
RAVEN S50	94	41	3	8.3	44.1	3.7
RAVEN S55	684	612	43	7.0	92.2	6.5
RKWELLNA285	341	312	32	10.3	91.5	9.4
ROBSTRNR22	169	158	8	4.9	93.5	4.5

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1982

PAGE 10 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
RYAN ST3	158	74	17	23.1	47.0	10.9
RYAN STA	32	9	3	33.7	27.5	9.3
SCHLTERKA6	74	67	3	4.8	90.3	4.3
SCWZERG164	891	657	107	16.2	73.7	12.0
SCWZERSG1	758	539	70	13.0	71.3	9.3
SCWZERSG2	576	452	56	12.5	78.4	9.8
SEMCO CLNGER	26	21	1	5.9	81.4	4.8
SKRSKY55	79	23	5	22.9	29.6	6.8
SKRSKY58	55	14	4	28.3	25.0	7.1
SMITH 600	213	173	38	21.8	81.4	17.8
SNIAS 350	228	196	22	11.2	85.8	9.6
STNSON10	162	52	7	13.3	32.3	4.3
STNSON15	127	50	5	10.2	39.2	4.0
STNSONV7	101	37	7	19.3	36.2	7.0
STOLAMRC3	214	75	6	8.0	35.2	2.8
TCRFTA	30	14	3	19.0	47.4	9.0
TCRAFTBC	1797	722	116	16.1	40.2	6.5
TCRAFTBL	225	108	10	9.0	47.9	4.3
TRYTEK65	341	157	21	13.2	46.0	6.1
UNIVACGC1	646	422	79	18.6	65.4	12.2
UNIVAR108	1971	1037	112	10.8	52.6	5.7

TABLE 2 - 11
 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
 MANUFACTURER/MODEL GROUP
 1982
 PAGE 11 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
UNIVAR415	2350	1528	191	12.5	65.0	8.1
VARGA 2150	33	30	2	7.1	89.7	6.4
VARGA G21	99	85	5	5.7	85.7	4.9
WACO AS0	29	8	1	10.4	26.9	2.8
WACO UPF7	161	37	33	89.3	23.2	20.7
WACO YK	54	11	2	16.8	20.3	3.4
WTHRLY201	71	70	2	3.0	98.2	3.0
TOTAL	255367	209779	1238	0.6	82.1	0.5

TABLE 2 - 12

**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE**

PAGE 1 OF 6

AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	IMC DAY		IMC NIGHT		TOTALS	
		STD ERROR	HOURS FLOWN	STD ERROR	HOURS FLOWN	STD ERROR	HOURS FLOWN

--FIXED WINE--

PISTON 1 ENGINE

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/4 SEALS

TOTAL 2 ENGINE

OTHER PISTON

TOTAL PISTON

TIPBODDOPPES = 2 ENGINES

108 173029 19756 4360 56 604672 67544

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TABLE 2 - 12

**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1982**

PAGE 2 OF 6

AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	IMC DAY			IMC NIGHT			TOTALS		
		STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
--FIXED WING - CONTINUED										
TURBOJETS										
2 ENGINE	3150	.87	343843	63426	.3087	102	111722	14350	.3150	87
OTHER TURBOJET	625	0	58399	29359	.549	81	22347	6802	.685	0
TOTAL TURBOJET	3835	.87	402242	69891	.3636	130	134068	15881	.3835	87
ALL FIXED WING	78400	1501	3695654	203454	54533	1387	1355479	96340	78830	1501
--ROTORCRAFT--										
2-48 PISTON	89	.56	4260	3542	.3	6	431	1354	.89	56
TURBINE	375	118	15516	5893	.321	114	7973	3590	.375	118
TOTAL ROTORCRAFT	464	130	19775	6876	.324	114	8404	3837	.464	130
--OTHER AIRCRAFT---	62	51	267	252	0	0	0	0	.62	51
TOTALS	78926	1507	3715933	203571	54857	1392	1363970	96416	79356	1507

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 12

**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1982**

PAGE 3 OF 6

AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	VMC DAY			VMC NIGHT			TOTALS		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
--FIXED WING--										
PISTON - 1 ENGINE										
1-3 SEATS	57190	171	7567899	338271	20699	923	580812	63987	57460	110 8152017
4+ SEATS	105604	258	12128057	397481	66825	1328	1589454	108769	108267	110 13714670
TOTAL 1 ENGINE	162794	310	19695955	521937	87524	1617	2170266	124474	163727	155 21866687
PISTON - 2 ENGINES										
1-6 SEATS	16233	98	1875783	119816	13692	403	545915	73027	16244	96 2423246
7+ SEATS	7964	162	1362936	95233	8961	229	428553	62818	8138	134 1790866
TOTAL 2 ENGINE	24197	189	3238719	153053	20853	463	974468	96328	24382	165 4214111
OTHER PISTON	139	4	16443	6636	78	16	12686	4148	139	4 24147
TOTAL PISTON	187130	363	22951117	543956	108256	1682	3157420	157449	188248	226 26104945
TURBOPROPS - 2 ENGINES										
1-12 SEATS	4118	117	878338	117922	3557	184	193164	23174	4118	117 1070966
13+ SEATS	579	32	226364	40380	577	33	98515	27652	579	32 324877
TOTAL 2 ENGINE	4697	122	1104702	124644	4134	187	291678	36079	4697	122 1395843
OTHER TURBOPRP	149	0	31640	9085	77	23	20202	9948	149	0 51842
TOTAL TURBOPRP	4846	122	1136342	124973	4211	188	311880	37425	4846	122 1447685
										141161

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1982

PAGE 4 OF 6

AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	VMC DAY			VMC NIGHT			TOTALS			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
--FIXED WING - CONTINUED											
TURBOJETS											
2 ENGINE	3156	86	687428	63181	2818	145	217091	42372	3156	86	904519
OTHER TURBOJET	494	91	146730	33211	490	92	37225	11364	494	91	183956
TOTAL TURBOJET	3649	125	834158	71378	3308	172	254316	43869	3649	125	1088474
ALL FIXED WING	195625	403	24921618	562673	115774	1701	3723616	196743	286	28641105	630654
--ROTORCRAFT--											
PISTON	2354	46	493616	46306	960	119	100562	22874	2364	45	594234
TURBINE	3639	60	1596709	131418	2342	187	154486	38245	3743	7	1750795
TOTAL ROTORCRAFT	5993	76	2089925	139337	3302	222	255048	44564	6107	45	2345029
-OTHER AIRCRAFT---	5167	51	384047	40121	10	5	784	1002	5171	51	384861
TOTALS	206784	413	27397337	581056	119085	1716	3979703	173500	208022	294	31376007
											648742

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 12
GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1982

AIRCRAFT TYPE	DAY - TOTAL			NIGHT - TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
--FIXED WING--						
PISTON - 1 ENGINE						
1-3 SEATS	57399	132	7654563	339729	20827	924
4+ SEATS	106038	193	13575449	432322	67633	1323
TOTAL 1 ENGINE	163438	234	21230013	549835	88460	1613
PISTON - 2 ENGINES						
1-6 SEATS	16378	6	2491446	157497	14034	382
7+ SEATS	8451	54	1923751	153799	7448	184
TOTAL 2 ENGINE	24828	54	4415197	220135	21483	424
OTHER PISTON	140	0	20236	7771	81	16
TOTAL PISTON	188406	240	25665446	592316	110024	1668
TURBOPROPS - 2 ENGINES						
1-12 SEATS	4427	0	1308916	119954	4168	108
13+ SEATS	610	0	371690	61849	609	8
TOTAL 2 ENGINE	5037	0	1680606	134960	4776	108
OTHER TURBOPRP	149	0	32460	8959	77	23
TOTAL TURBOPRP	5186	0	1713066	135257	4853	110

TABLE 2 - 12
 GENERAL AVIATION ANNUAL HOURS FLOWN
 BY WEATHER AND LIGHT CONDITIONS
 BY AIRCRAFT TYPE
 1982

AIRCRAFT TYPE	DAY - TOTAL			NIGHT - TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
--FIXED WING - CONTINUED						
TURBOJETS						
2 ENGINE	3309	0	1031270	76884	3140	90
OTHER TURBOJET	687	0	219540	34238	549	81
TOTAL TURBOJET	3996	0	1250810	83980	3689	121
ALL FIXED WING	197589	240	28629322	613339	118566	1676
--ROTORCRAFT---						
PISTON	2409	10	497644	46489	963	119
TURBINE	3674	48	1611824	131125	2342	187
TOTAL ROTORCRAFT	6083	49	2109468	139122	3305	222
---OTHER AIRCRAFT---	5229	4	384280	40182	10	5
TOTALS	208901	245	31117478	630202	121880	1691

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY REGION OF BASED AIRCRAFT
1982**

PAGE 1 OF 3

REGION	IMC DAY			IMC NIGHT			TOTALS					
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ALASKAN	860	221	108956	22918	469	164	26623	5851	864	221	135350	17780
CENTRAL	5164	610	276278	51277	3872	533	147482	56920	5166	610	423759	89143
EASTERN	9658	818	494480	69115	7201	710	174677	23691	9814	826	669157	87761
EUROPEAN OFFICE	56	57	1840	2250	39	51	374	607	56	57	2214	2772
GREAT LAKES	14362	979	747193	82782	10399	834	261112	37547	14396	979	1007748	111918
NEW ENGLAND	31117	481	150106	34921	2497	433	114537	61666	3172	485	264643	81788
NORTHWEST MT.	6270	659	214664	36592	4194	550	87076	24397	6396	676	301740	53324
SOUTHERN	15959	1023	892674	170656	10871	837	267658	42718	15960	1023	1159796	210353
SOUTHWESTERN	12634	900	518777	61982	8698	734	189408	25012	12701	902	710765	8054
WESTERN-PACIFIC	10926	855	371100	63743	6924	679	137601	24777	10938	855	508703	85195
TOTALS	78926	1507	3715933	203571	54857	1392	1363970	96416	79356	1507	5080936	264417

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY REGION OF BASED AIRCRAFT
1982

PAGE 2 OF 3

REGION	VMC DAY			VMC NIGHT			TOTALS		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
ALASKAN	6581	665	1091692	177358	2686	440	47398	6762	6585
CENTRAL	13065	945	1401667	135995	7303	720	261501	64022	13214
EASTERN	22531	1191	2912853	260092	14531	999	515029	65865	22589
EUROPEAN OFFICE	106	85	7874	5442	34	35	461	431	106
GREAT LAKES	36423	1450	4011086	269845	21022	1167	746700	80087	36647
NEW ENGLAND	8206	753	1092402	148639	5100	616	172791	37475	8257
NORTHWEST MT.	20864	1148	2444035	201988	10731	862	236326	38368	21038
SOUTHERN	31338	1370	4808526	349231	20433	1150	737614	75748	31451
SOUTHWESTERN	34434	1425	5085438	316267	18318	1079	697287	106055	34770
WESTERN-PACIFIC	33199	1379	4504443	315879	19528	1109	620851	59916	33314
TOTALS	206784	413	27397337	581056	119085	1716	3979703	173500	208022
									294 31376007
									648742

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13
 GENERAL AVIATION ANNUAL HOURS FLOWN
 BY WEATHER AND LIGHT CONDITIONS
 BY REGION OF BASED AIRCRAFT
 1982

REGION	DAY - TOTAL			NIGHT - TOTAL		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
ALASKAN	6803	673	1200649	176951	2716	441
CENTRAL	13350	954	1677938	159516	7571	728
EASTERN	22754	1195	3407334	290178	14995	1011
EUROPEAN OFFICE	106	85	9713	6757	50	51
GREAT LAKES	36696	1454	4756720	303081	21510	1177
NEW ENGLAND	8211	753	1242625	164791	5212	622
NORTHWEST MT.	21078	1152	2658694	217554	11006	868
SOUTHERN	31554	1373	5701293	421210	20853	1157
SOUTHWESTERN	34879	1431	5621420	334798	18717	1089
WESTERN-PACIFIC	33459	1383	4876045	339179	19869	1116
TOTALS	208901	245	31117478	630202	121880	1691
					5339465	214098

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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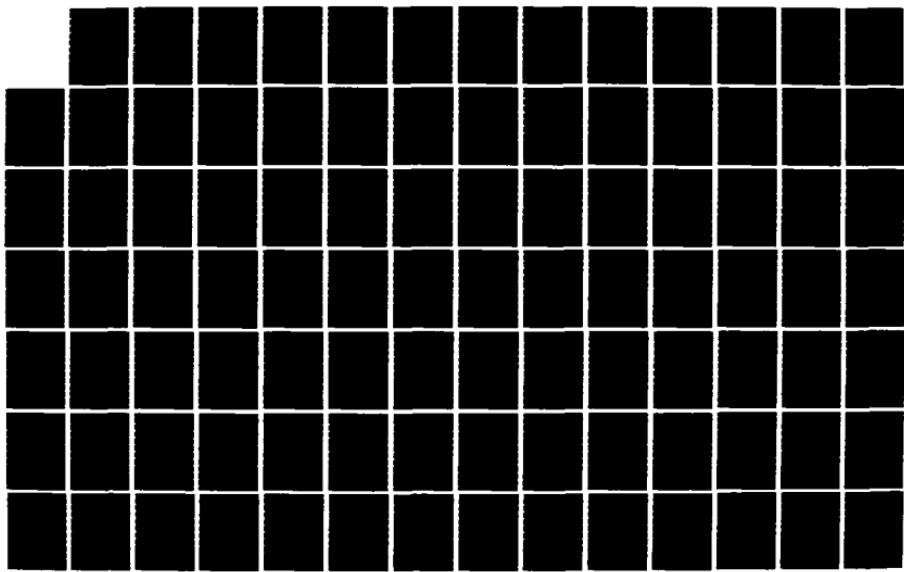
GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY(U)
TRANSPORTATION SYSTEMS CENTER CAMBRIDGE MA
J C SCHWENK ET AL. 1982 DOT-TSC-FAA-83-3 FRA-MS-83-5

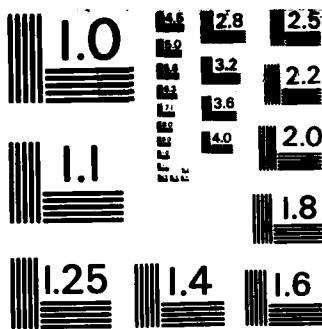
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TABLE 2 - 14

**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982**

PAGE 1 OF 22

MANUFACTURER/ MODEL GROUP	INC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
OTHER 01	166	102	3387	2189	6086	39
OTHER 02	596	197	32779	15069	2099	0
OTHER 03	511	113	11415	4241	865	45
OTHER 04	326	57	72018	52734	352	0
OTHER 05	12	3	1378	454	22	0
OTHER 06	1325	62	128413	211732	1292	73
OTHER 07	322	0	157237	71832	320	9
OTHER 08	27	9	849	418	47	0
OTHER 09	1238	90	166798	35858	1372	48
OTHER 10	354	0	21884	4587	172	103
OTHER 11	53	50	159	151	305	50
OTHER 12	324	113	23517	10198	972	0
OTHER 13	72	60	145	120	2027	60
AIRPTSA	0	0	0	0	177	0
AIRTRCAT300	0	0	0	0	350	0
AMD FALC20	216	0	29640	9208	194	26
ARCTICS1A	0	0	0	0	36	0
ARDONCA15	0	0	0	0	132	0
ARDONCA65	0	0	0	0	71	0
ARDONCAC3	0	0	0	0	8	0

NOTE: SEE PAGE 2-36 FOR CODING

TABLE 2 - 14

**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982**

PAGE 2 OF 22

MANUFACTURER / MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	
		IMC			VMC				
AVIAN FALCON	0	0	0	0	0	23	0	876	106
AYRES S2	0	0	0	0	0	678	0	247843	35098
AYRES S2	0	0	0	0	0	58	0	31480	4593
AYRES S2T	0	0	0	0	0	856	0	46846	10351
BALWKSFIREFY	18	3	233	56	27	0	1769	390	
BEAGLE FB206	269	0	49088	16342	269	0	68019	15567	
BEECH 100	17	4	109	705	77	0	3737	430	
BEECH 17	233	25	24472	5464	454	5	92774	13528	
BEECH 18	737	0	132876	29973	656	57	176163	39841	
BEECH 18	916	180	41024	22667	2645	0	303842	53210	
BEECH 18	1105	141	26260	19357	1530	13	141218	22608	
BEECH 200	3391	334	79121	62678	6094	0	559997	35409	
BEECH 23	1314	134	75952	21838	1630	13	302570	37955	
BEECH 33	0	0	0	0	233	0	30774	10932	
BEECH 35	222	0	6785	1721	222	0	31105	7875	
BEECH 36	1953	75	135819	32028	2010	0	305356	43677	
BEECH 45	1261	0	70814	11848	1261	0	218303	34517	
BEECH 50	416	0	10426	6837	412	21	74124	21193	
BEECH 55	105	19	14154	8759	133	7	25089	6304	
BEECH 58	124	9	10783	3750	134	4	25049	7465	
BEECH 60	667	0	107480	22768	628	48	174671	37736	

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**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982**

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	IMC			VMC			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	
BEECH 65	417	72	4954	9777	459	0	34433	8227
BEECH 80	3	2	5	134	106	0	16331	1283
BEECH 90	65	50	3279	8423	1933	9	935311	102710
BEECH 95	30	30	1408	366	813	7	204726	32712
BELL 204	0	0	0	0	168	0	8263	1111
BELL 206	0	0	0	0	60	0	2454	422
BELL 47	19	17	276	799	154	0	6574	1752
BLANCA11	503	85	10336	3362	1008	7	75708	10261
BLANCA1413	70	30	1613	1149	3830	25	300162	24375
BLANCA1419	6	8	305	191	685	6	86186	11984
BLANCA17	96	23	14371	480	114	0	90897	18606
BLANCA7	0	0	0	0	870	0	88558	27762
BLANCA7	0	0	0	0	3	0	207	0
BLANCA8	0	0	0	0	0	0	0	0
BNOM BN2	0	0	0	0	122	0	4863	456
BOEING75	12	8	118	36	641	3	33825	3478
BOEINGB17	3	9	12	0	1429	0	78544	9071
BOEINGC97	1443	325	50162	15093	17398	0	3451078	248142
CAMRON MODE1.0	39	49	62	0	1846	0	167986	40725
CESSNA120	10045	664	508294	69113	23300	97	3798470	269852
CESSNA140	109	49	995	411	1103	0	52501	5184

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**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
CESSNA150	931	234	40735	15305	2684	15
CESSNA170	417	159	13757	8011	2400	0
CESSNA172	5567	491	201981	40399	12844	0
CESSNA175	358	157	6317	3163	1314	0
CESSNA177	0	0	0	0	1646	0
CESSNA180	80	30	693	988	285	0
CESSNA182	43	35	2165	1271	133	0
CESSNA185	1158	241	36784	18167	2741	0
CESSNA188	306	76	112240	51847	240	92
CESSNA195	4445	296	182467	30255	5809	33
CESSNA205	54	27	1448	1358	169	0
CESSNA206	2425	169	128715	20944	2772	83
CESSNA207	258	28	8943	11379	259	27
CESSNA210	765	124	13386	6355	1165	0
CESSNA305	900	0	135332	30808	900	0
CESSNA310	190	27	7807	4705	208	7
CESSNA320	635	73	60963	20589	700	35
CESSNA337	99	12	4756	912	135	0
CESSNA340	640	52	42284	13243	684	0
CESSNA401	1218	24	112778	30710	1137	78
CESSNA402	501	0	70957	43842	466	36

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**GENERAL AVIATION ANNUAL HOURS FLOWN
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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	IMC			VMC			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	
CESSNA411	0	0	0	0	199	0	2687	1163
CESSNA414	0	0	0	0	32	0	1293	280
CESSNA421	177	152	1950	14036	450	0	49342	4431
CESSNA500	9	3	1936	1177	11	2	2524	745
CHILD S1	0	0	0	0	40	0	2771	399
COMMTH185	1	1	14	0	5	0	195	0
CONAERLA4	6	3	0	38	20	0	380	95
CURT1SC46	0	0	0	0	6	0	154	0
CURTISTRAIR	0	0	0	0	66	0	1896	535
CURTISTRAIR	5	3	109	7	191	0	60331	6606
CV/AC 240	66	16	10016	3808	75	0	87972	33551
CVAC BT13	0	0	0	0	52	0	2384	271
CVAC P4Y	0	0	0	0	19	0	646	212
DHAV DHC1	114	22	5797	3394	209	7	51549	10624
DHAV DHC2	0	0	0	0	24	0	3250	1014
DHAV DHC2	25	11	2738	841	48	4	1858	1620
DHAV DHC6	21	6	6770	2095	32	0	7478	2433
DHAVXXDH82	0	0	0	0	17	0	3977	609
DOUG A26	73	0	52507	16084	52	15	66313	7856
DOUG DC3	0	0	0	0	283	0	81017	17323
DOUG DC4	0	0	0	0	2	0	49	13

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**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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MANUFACTURER / MODEL GROUP	INC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
DOUG DC8	0	0	0	0	65	0
DOUG DC7	6	1	329	434	17	0
EMAIR MA1	0	0	0	0	37	0
EMB 110	0	0	0	0	82	0
ENSTRMF28	0	0	0	0	94	0
ENSTRMF26	0	0	0	0	131	0
FLEET 16B	0	0	0	0	16	0
FRCHLD24	0	0	0	0	19	0
FRCHLD24	299	139	554	201	575	0
FRCHLD24	2	13	75	661	320	0
FRCHLD119	0	0	0	0	477	0
FRCHLDFH1100	0	0	0	0	183421	10961
FRCHLDHM62	381	77	14293	2715	506	0
GLASFLH301	294	30	93783	65287	217	79
GRTLKS2T1	185	39	3893	2457	244	7
GRUMMANG21	428	0	74456	14472	372	38
GRUMMANTBM	177	90	3032	1446	560	0
GRUMMAVAA1	485	139	8348	2617	1268	0
GRUMMAVAA5	167	0	12373	5224	167	0
GRUMAVG164	137	0	17228	3905	132	10
GULSTM112	21	4	354	154	55	0
GULSTM500	1	1	32	289	15	0

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**GENERAL AVIATION ANNUAL HOURS FLOWN
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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
GULSTM680	0	0	0	0	20	0
GULSTM690TP	8	12	2418	2125	304	12
GULSTMMA1	5	8	295	150	468	6
GULSTMMA5	0	0	0	0	491	0
GULSTMCG1159	4	1	385	120	6	0
GULSTMCG159	0	0	0	0	0	0
GULSTMG44	0	0	0	0	42	0
HELIO H391	10	2	248	81	27	0
HELIO H395	152	0	23210	9408	119	29
HILLERUH12	4	1	38	403	25	0
HILLERUH12	0	0	0	0	13	0
HUGHES269	167	0	11461	3284	167	0
HUGHES369	330	0	68787	24547	330	0
HMKSLYDH104	0	0	0	0	153	0
HMKSLYDH114	136	0	19450	10705	94	25
HYNES 82	16	0	514	119	16	0
INTRCP200	0	0	0	0	1	0
ISRAEL1124	3	7	159	1113	1392	5
JBMSTRDGA15	2	0	297	0	2	0
LAIKFH10	13	7	120	21	220	0
LEAR 24	84	77	464	5253	410	0

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**GENERAL AVIATION ANNUAL HOURS FLOWN
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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	IMC			VMC		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
LEAR 35	0	0	0	0	8	0	364
LET L13	0	0	0	0	66	0	3105
LKHEED1329	0	0	0	0	16	0	442
LKHEED18	2894	316	94288	16908	5359	17	595042
LKHEED33	362	0	34806	5415	356	14	93559
LUSCOM8	4	2	16	105	31	0	1954
MARTIN404	8	3	54	430	83	0	4433
MAULE M4	6	2	54	19	34	0	1697
MAULE M5	4	7	9	38	334	0	18560
MCCULHJ2	123	25	2135	204	860	5	51915
MCLISHFUNKR	0	0	0	0	33	0	1848
MNCOUPE90	0	0	0	0	25	0	2542
MOONEYM20	0	0	0	0	1	0	226
MTSBSIMU2	3	5	149	444	100	5	2750
MULTECD16	311	84	31600	23791	424	0	56038
NAMER F51	0	0	0	0	20	0	419
NAMER NA260	0	0	0	0	2085	0	136055
NAMER T6	1	1	329	3	86	1	3986
NAVIONNAVION	0	0	0	0	151	0	10755
NOORD 574	0	0	0	0	1044	0	61827
NORWST65	0	0	0	0	273	0	13992
							5123

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**GENERAL AVIATION ANNUAL HOURS FLOWN
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MANUFACTURER/ MODEL GROUP	INC	VNC	INC	VNC				
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ORL-HELH19	2	2	20	0	56	2	3127	694
PICARDAX6	126	102	25115	5084	2428	102	314074	45199
PIPER 500	18	8	104	840	281	0	22688	4231
PIPER J2	246	149	1900	524	3341	0	199454	27183
PIPER J3	2473	209	129181	24861	3226	0	468515	69709
PIPER J4	1346	263	17200	65969	2915	0	251162	39767
PIPER J5	9	27	549	0	1095	0	309902	45064
PIPER PA12	7682	610	382433	44772	21082	0	2925985	187001
PIPER PA16	987	85	36860	9287	1129	0	115878	14273
PIPER PA17	1739	71	328833	120830	1739	72	435401	41017
PIPER PA18	545	0	58591	17821	545	0	73512	22169
PIPER PA20	2713	274	84809	20011	3890	0	442355	63158
PIPER PA22	1778	129	119301	18817	2140	0	416538	51442
PIPER PA22	0	0	0	0	317	0	89584	17697
PIPER PA23	11	29	232	1501	1563	0	612158	163913
PIPER PA24	345	0	36748	27104	345	0	126989	55627
PIPER PA25	23	4	688	317	53	0	3353	348
PIPER PA28	0	0	0	0	41	0	943	102
PIPER PA28	0	0	0	0	812	0	25286	3962
PIPER PA30	312	0	75115	19204	312	0	86450	26322
PIPER PA31	1	3	264	388	157	3	41460	8928

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GENERAL AVIATION ANNUAL HOURS FLOWN
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MANUFACTURER / MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
PIPER PA31	4	5	60	1200	70	5
PIPER PA31T	0	0	0	0	9	0
PIPER PA32	0	0	0	0	67	0
PIPER PA34	0	0	0	0	657	0
PIPER PA36	0	0	0	0	539	0
PIPER PA38	0	0	0	0	452	0
PIPER PA44	0	0	0	0	21	0
PROJCT200	0	0	0	0	23	0
RAVEN S50	0	0	0	0	14	0
RAVEN S55	118	46	1288	310	173	0
RKWELLNA2G5	48	25	1057	5994	196	0
ROBSINR22	0	0	0	0	52	0
RYAN ST3	0	0	0	0	50	0
SCHLERKA8	2	1	12	0	75	0
SCWZERG164	0	0	0	0	14	0
SCWZERSG1	0	0	0	0	722	0
SCWZERSG2	0	0	0	0	108	0
SEMCO CLNGER	0	0	0	0	157	0
SKRSKY55	56	50	57	0	422	0
SKRSKY58	33	32	97	20	1037	0

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 GENERAL AVIATION ANNUAL HOURS FLOWN
 BY WEATHER AND LIGHT CONDITIONS
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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	IMC			VMC		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
SMITH 600	7	24	33	265	1528	0	91155
SNIAS 350	1	1	5	30	30	0	1338
STNSON10	5	4	24	8	85	0	7021
STNSONL5	0	0	0	0	8	0	1182
STNSONV77	0	0	0	0	37	0	411
STOLAMRC3	0	0	0	0	11	0	110
TCRAFTA	0	0	0	0	70	0	16968
TOTALS	79356	1507	5080936	264417	208022	294	31376007
							648742

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	
OTHER 01	6058	52	376524	57875	191	109	5086	4678
OTHER 02	2009	88	166545	37397	866	215	32877	14120
OTHER 03	902	0	81917	14087	667	100	28193	19115
OTHER 04	352	0	97269	47055	162	109	17792	12835
OTHER 05	22	0	7403	2115	11	3	3480	1210
OTHER 06	1398	0	420676	113625	1281	77	100754	22092
OTHER 07	322	0	192876	55945	322	0	117558	36407
OTHER 08	47	0	3563	1060	27	9	2406	1578
OTHER 09	1419	0	397941	55124	1227	92	148411	39128
OTHER 10	354	0	128627	27244	172	103	17130	11209
OTHER 11	358	0	7921	2892	0	0	0	0
OTHER 12	921	53	430353	64858	764	99	82017	31559
OTHER 13	2099	0	136124	17990	0	0	0	0
AIRPTSA	177	0	17798	2738	0	0	0	0
AIRTRCAT300	350	0	101374	19035	75	57	3375	2559
AMD FALC20	216	0	67129	8806	216	0	19456	3493
AMD FALC50	82	0	27167	2747	82	0	14717	1184
ARCTICS1A	36	0	1475	180	3	1	15	7
ARONCA15	132	0	9892	1409	132	0	1356	23
ARONCA55	71	0	3522	233	0	0	0	0
ARONCAC3	8	0	110	19	0	0	0	0

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MANUFACTURER / MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
AVIAN FALCON	23	0	876	106	0	0	0
AYRES S2	676	0	230795	28856	121	68	17048
AYRES S2	56	0	17907	6803	30	17	13574
AYRES S2T	856	0	46846	10351	0	0	0
BALWKSFIREFY	27	0	1690	396	16	3	311
BEAGLEB206	269	0	90788	9085	269	0	24319
BEECH 100	77	0	3715	438	23	4	131
BEECH 17	459	0	83746	13819	283	24	33500
BEECH 18	737	0	243347	38437	737	0	65693
BEECH 18	2645	0	304246	51956	1393	189	40596
BEECH 18	1533	0	145702	18215	1120	139	21777
BEECH 200	6084	27	557131	36957	4379	302	81394
BEECH 23	1633	0	334174	36280	1277	140	44348
BEECH 33	233	0	30623	10902	80	62	151
BEECH 35	222	0	31319	6096	222	0	6550
BEECH 36	2010	0	308855	47087	1707	162	132320
BEECH 45	1261	0	223522	29019	1177	74	65595
BEECH 50	416	0	62621	14004	416	0	21929
BEECH 55	137	0	24113	6273	101	20	15130
BEECH 58	138	0	29773	8782	134	4	5915
BEECH 60	667	0	196253	38788	667	0	85899
							22035

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	
BEECH 65	459	0	33448	8080	417	72	5849	11031
BEECH 80	106	0	14828	1243	51	5	1510	269
BEECH 90	1935	0	891159	102674	1182	136	47431	20471
BEECH 95	811	10	180116	29108	334	79	26019	13770
BELL 204	168	0	8263	1111	0	0	0	0
BELL 206	60	0	2416	408	7	7	38	263
BELL 47	154	0	8238	1844	57	25	614	1984
BLANCA11	1009	0	79841	9547	693	79	6451	1792
BLANCA1413	3865	14	292387	23859	737	87	9285	1693
BLANCA1419	688	0	83980	11465	273	43	2563	867
BLANCA17	114	0	93900	18714	105	17	10343	1172
BLANCA7	870	0	88171	27786	77	71	387	894
BLANCA7	3	0	207	0	0	0	0	0
BLANCA8	0	0	0	0	0	0	0	0
BNORM BN2	122	0	4861	456	2	2	2	197
BOEING75	636	6	32077	3326	219	28	1865	668
BOEINGB17	1429	0	73584	7791	494	104	4972	1877
BOEINGC97	17384	34	3146543	225554	11352	561	354757	36088
CAMRONMODEL	1786	61	146355	30721	1031	171	21693	10808
CESSNA120	23342	79	3755166	274829	16173	620	555394	55768
CESSNA140	1101	7	50132	4819	591	83	3354	1242

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY				NIGHT			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	
CESSNA150	2686	0	208827	28466	1624	241	44628	15448	
CESSNA170	2400	0	307696	89747	591	181	17878	8781	
CESSNA172	12844	0	1573565	120966	8224	475	233885	46623	
CESSNA175	1191	103	317139	91484	731	175	88733	60170	
CESSNA177	1646	0	465611	58682	145	99	1272	2792	
CESSNA180	285	0	11493	2272	186	32	1379	1042	
CESSNA182	133	0	8776	5063	89	35	3455	2372	
CESSNA185	2741	0	589609	122499	1485	243	42374	34586	
CESSNA188	386	0	166622	41168	181	94	26987	9942	
CESSNA195	5822	0	761873	58393	4244	310	152376	37246	
CESSNA205	169	0	23480	3794	75	29	2736	1724	
CESSNA206	2863	12	351925	43314	2558	145	144254	26038	
CESSNA207	276	0	27511	6531	262	25	3610	4230	
CESSNA210	1165	0	126521	27715	801	121	15061	8487	
CESSNA305	900	0	274790	42811	900	0	54210	11729	
CESSNA310	210	0	41953	12568	94	45	7518	3419	
CESSNA320	717	0	180700	48188	646	68	60214	22774	
CESSNA337	135	0	16541	2475	121	9	3822	587	
CESSNA340	684	0	154682	29678	645	49	36313	8218	
CESSNA401	1226	0	252687	34620	1213	30	84648	27021	
CESSNA402	501	0	161241	36467	501	0	38316	10770	

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
CESSNA411	199	0	2687	1163	0	0	0
CESSNA414	32	0	1273	276	3	2	20
CESSNA421	450	0	49342	4431	177	152	1950
CESSNA500	14	0	2277	593	14	0	2183
CHILD S1	40	0	2771	399	0	0	0
COMWTH185	5	0	207	0	1	1	11
CONAERLA4	20	0	380	95	6	3	0
CURTIS C46	6	0	154	0	0	0	0
CURTIS TRVAIR	66	0	1871	527	5	5	24
CURTIS TRVAIR	191	0	58479	6606	42	7	1951
CVAC 240	75	0	64829	17913	66	16	43159
CVAC BT13	52	0	2384	271	0	0	0
CVAC P4Y	19	0	617	185	3	3	26
DHAV DHC1	214	0	27092	7834	116	22	30606
DHAV DHC2	24	0	2932	902	21	6	318
DHAV DHC2	49	0	2067	939	25	11	1656
DHAV DHC6	32	0	6176	1866	20	6	8004
DHAVXXDH82	17	0	3878	624	3	2	99
DOUG A26	73	0	82091	11062	73	0	36730
DOUG DC3	283	0	72219	14619	149	53	8797
DOUG DC4	2	0	49	13	0	0	0

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BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD ERROR	DAY		NIGHT		STD ERROR	
			HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR		
DOUG DC6	65	0	2141	215	4	2	15	135
DOUG DC7	17	0	2024	108	2	1	43	364
EMAIR MA1	37	0	2772	758	5	3	126	107
EMB 110	82	0	3102	411	3	2	6	916
ENSTRMF28	94	0	6079	491	0	0	0	0
ENSTRMF28	131	0	8378	847	0	0	0	0
FLEET 16B	16	0	2575	279	2	2	4	0
FRCHLD24	19	0	535	78	8	2	11	2
FRCHLD24	575	0	36719	10226	443	117	2267	881
FRCHLD119	320	0	27525	3880	235	69	1294	1436
FRCHLDFH1100	477	0	183421	22284	0	0	0	0
FRCHLDMS2	505	9	44821	8071	405	72	13711	2530
GLASFLH301	303	0	31424	23950	298	23	179291	48198
GRTLK2T1	246	0	10866	6808	229	22	13783	12458
GRUMANG21	428	0	138844	16844	383	35	33233	6658
GRUMANTBM	560	0	31585	8072	286	97	7142	1795
GRUMAVAA1	1268	0	219643	53095	1004	117	25635	7736
GRUMAVAA5	167	0	64645	13048	167	0	14360	8413
GRUMAVG164	137	0	59858	9579	137	0	15983	5220
GULSTM112	55	0	6951	1026	24	4	303	135
GULSTM500	15	0	842	163	5	1	43	902

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**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982**

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	
GULSTM680	20	0	1628	285	3	3	15	155
GULSTM890TP	312	0	54298	10621	80	32	3921	3477
GULSTMMA1	463	10	127681	19460	345	35	53528	19554
GULSTMMA5	491	0	222693	48494	298	85	55863	30958
GULSTMG1159	6	0	1038	242	2	1	294	84
GULSTMG159	0	0	0	0	0	0	0	0
GULSTMG44	42	0	2220	1299	0	0	0	0
HELI0 H391	27	0	2249	157	19	2	252	38
HELI0 H395	152	0	49385	10584	152	0	21112	13082
HILLERUH12	25	0	961	92	5	1	32	76
HILLERUH12	13	0	247	87	2	1	16	8
HUGHES269	167	0	44116	7992	167	0	18017	4459
HUGHES369	330	0	113456	19613	330	0	23828	3238
HMKSPLYDH104	150	4	17204	4084	3	4	733	432
HMKSPLYDH114	136	0	42307	9876	112	20	9223	1502
HYNES B2	16	0	1528	608	16	0	1176	661
INTRCP200	1	0	0	0	0	0	0	0
ISRAEL1124	1390	8	82138	19700	175	53	1800	7386
JBMSTRDGA15	2	0	249	0	2	0	153	0
LAIKFN10	220	0	12710	1483	91	14	681	262
LEAR 24	410	0	27351	5707	300	84	5414	9266

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	
LEAR 25	8	0	316	95	3	1	48	75
LET L13	64	1	3040	228	11	2	74	522
LKHEED1329	16	0	441	84	1	2	1	151
LKHEED18	5363	0	586873	57566	3652	295	102457	27311
LKHEEDT33	362	0	100074	14145	356	14	28280	3879
LUSCOM8	31	0	1888	231	19	3	82	30
MARTIN104	83	0	4447	369	8	3	40	221
MAULE M4	34	0	1736	152	6	2	14	14
MAULE M5	334	0	18182	2153	86	29	385	535
MCCULHJ2	862	3	49034	2991	428	36	5009	984
MCLISHFUNKB	33	0	1848	474	0	0	0	0
MNCOUPE90	25	0	2535	607	1	1	7	0
MOONEYM20	1	0	226	0	0	0	0	0
MTSBSTMU2	103	0	2901	553	0	0	0	0
MULTECD16	424	0	44858	13852	311	84	42780	39484
NAMER F51	20	0	419	56	0	0	0	0
NAMER NA250	2085	0	138045	28105	3	14	10	33
NAMER T6	87	0	4251	573	11	4	30	30
NAVIGAVION	151	0	10895	2380	18	15	60	181
NORD SV4	994	62	57443	16397	167	106	4329	562
NORWST65	273	0	13992	5123	0	0	0	0

TABLE 2 - 14

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT			
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	
ORLHELH19	58	0	3036	494	5	4	67	0
PICARDAX6	2554	0	332618	46379	418	174	6573	4916
PIPER 600	264	8	21846	4024	103	16	946	2268
PIPER J2	3341	0	179208	22786	1261	276	22147	7769
PIPER J3	3226	0	437641	51540	2819	164	159848	49511
PIPER J4	2915	0	248237	40730	1683	261	20126	4460
PIPER J5	1095	0	308913	45348	9	27	1538	88
PIPER PA12	21023	69	2831467	187378	14441	613	452028	45409
PIPER PA16	1129	0	130131	15480	822	114	22607	4776
PIPER PA17	1831	37	548493	80704	1832	36	215741	47995
PIPER PA18	545	0	102288	20528	472	57	29815	12795
PIPER PA20	3890	0	483662	66709	2865	263	53284	13934
PIPER PA22	2140	0	433023	48650	1951	97	102817	22305
PIPER PA24	3117	0	89559	17702	11	17	25	336
PIPER PA25	1471	79	517291	132080	1348	116	95099	37268
PIPER PA28	345	0	148266	75877	241	75	15472	5070
PIPER PA28	53	0	3644	375	24	4	396	773
PIPER PA28	41	0	943	102	0	0	0	0
PIPER PA28	612	0	25286	3962	0	0	0	0
PIPER PA30	312	0	120606	13278	312	0	40959	9884
PIPER PA31	158	0	40189	8428	56	17	1535	1462

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1982

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
PIPER PA31	74	0	2774	542	0	0	0
PIPER PA31T	9	0	214	44	0	0	0
PIPER PA32	68	1	2856	366	1	1	10
PIPER PA34	657	0	189476	44785	0	0	0
PIPER PA36	539	0	37460	7729	0	0	0
PIPER PA38	452	0	103267	23208	0	0	0
PIPER PA44	21	0	683	93	2	1	23
PROJ T200	23	0	4254	662	0	0	0
RAVEN S50	14	0	1872	265	2	1	19
RAVEN S55	173	0	17651	4792	173	0	8357
RKVELLNA265	158	23	55940	16015	152	24	6330
ROBBINSR22	52	0	1429	195	7	3	24
RYAN ST3	50	0	2238	241	4	2	30
RYAN STA	37	0	961	168	2	2	10
SCHLICKAG	72	2	2618	348	10	3	234
SCHZERG164	14	0	227	58	0	0	0
SCHZERSG1	722	0	32342	6809	0	0	0
SCHZERSG2	106	2	5489	761	2	2	25
SEMCO CLNGER	143	10	4128	1226	15	10	262
SKRSKYSS55	422	0	31572	7358	238	73	1552
SKRSKYSS58	1037	0	45392	8286	363	86	2195
							1181

TABLE 2 - 14
 GENERAL AVIATION ANNUAL HOURS FLOWN
 BY WEATHER AND LIGHT CONDITIONS
 BY SDR MANUFACTURER/MODEL GROUP
 1982

MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
SMITH 600	1528	0	85142	12022	818	185	6076
SNIAS 350	30	0	1288	181	2	2	58
STNSON10	85	0	6504	1041	32	8	541
STNSON15	8	0	180	10	0	0	0
STNSONV77	37	0	411	0	0	0	0
STOLAMRC3	11	0	110	14	1	1	0
TCRAFTA	68	3	16806	2102	2	3	161
TOTALS	208901	245	31117478	630202	121880	1691	5339465
							214098

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 15
GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982

PAGE 1 OF 10

AIRCRAFT TYPE	VHF COMMUNICATIONS			TRANSPOUNDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC BEC	GLIDE SLOPE	MLS	NO ILS
FIXED WING - PISTON											
1 ENG: 1-3 SEATS											
ESTIMATED POPULATION	39147	16126	8860	28370	22847	2831	59243	14256	7437	5208	36
% STANDARD ERROR	A	A	A	A	B	A	B	A	A	B	D
ESTIMATED % OF TYPE	47.7	19.6	10.8	34.6	27.8	3.4	72.2	17.4	9.1	6.3	0.0
1 ENG: 4+ SEATS											
ESTIMATED POPULATION	61929	61339	81354	3992	99188	44111	18820	85148	80577	70254	572
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	0
ESTIMATED % OF TYPE	52.5	52.0	68.9	3.4	84.1	37.4	15.9	72.2	68.3	59.5	0.5
1 ENGINE: TOTAL											
ESTIMATED POPULATION	101076	77464	90214	32362	122035	46943	78063	99404	88014	75462	608
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D
ESTIMATED % OF TYPE	50.5	38.7	45.1	16.2	61.0	23.5	39.0	49.7	44.0	37.7	0.3
2 ENG: 1-6 SEATS											
ESTIMATED POPULATION	6920	12610	16167	500	17679	14559	790	17918	17745	17144	109
% STANDARD ERROR	A	A	A	D	A	A	C	A	A	A	D
ESTIMATED % OF TYPE	37.5	68.3	87.5	2.7	95.7	78.8	4.3	97.0	96.1	92.8	0.6
2 ENG: 7+ SEATS											
ESTIMATED POPULATION	3352	7177	8545	316	9260	8267	801	9402	9082	9289	107
% STANDARD ERROR	A	A	A	C	A	A	B	A	A	A	D
ESTIMATED % OF TYPE	33.3	71.3	84.9	3.1	92.0	82.2	8.0	93.5	90.3	92.3	1.1

* * STANDARD ERROR * * CODE * *
* * GREATER LESS THAN * *
* * THAN OR * *
* * EQUAL TO * *
* * ----- * *
* * 0 % 10 % * * A *
* * 10 % 20 % * * B *
* * 20 % 30 % * * C *
* * 30 % * * D * *
* * ----- * *

TABLE 2 - 15
GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982

PAGE 2 OF 10

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	ND COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	NO ILS
2 ENGINE: TOTAL												
ESTIMATED POPULATION	10272	19786	24713	817	26939	22826	1591	27321	26827	26433	216	1051
% STANDARD ERROR	A	A	A	C	A	A	B	A	A	A	D	B
ESTIMATED % OF TYPE	36.0	69.4	86.6	2.9	94.4	80.0	5.6	95.8	94.0	92.7	0.8	3.7
PISTON: OTHER												
ESTIMATED POPULATION	161	135	196	51	270	144	71	205	196	189	4	136
% STANDARD ERROR	B	C	B	C	A	C	C	B	B	B	D	C
ESTIMATED % OF TYPE	47.2	39.7	57.4	14.9	79.1	42.1	20.9	60.1	57.3	58.5	1.2	39.9
PISTON: TOTAL												
ESTIMATED POPULATION	111510	97386	115122	33229	149244	69912	79726	126930	115037	102095	829	96865
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF TYPE	48.7	42.5	50.3	14.5	65.2	30.5	34.8	55.4	50.2	44.6	0.4	42.3
FIXED WING-TURBOPROP												
2 ENG: 1-12 SEATS												
ESTIMATED POPULATION	752	4131	4047	2	4486	4481	4	4438	4438	4362	74	52
% STANDARD ERROR	C	A	A	D	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	16.8	92.0	90.1	0.0	99.9	99.8	0.1	98.9	98.9	97.1	1.6	1.1
2 ENG: 13+ SEATS												
ESTIMATED POPULATION	145	574	596	0	642	560	0	601	601	601	52	41
% STANDARD ERROR	D	A	A	A	A	A	A	A	A	A	D	D
ESTIMATED % OF TYPE	22.6	89.3	92.7	0.0	99.8	87.0	0.0	93.4	93.4	93.4	8.1	6.4

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**GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982**

PAGE 3 OF 10

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	ILS
2 ENGINE: TOTAL	898	4705	4643	2	5128	5040	4	5039	4962	128	93	
ESTIMATED POPULATION	B	A	A	D	A	D	0.1	A	A	D	D	
% STANDARD ERROR	17.5	91.7	90.4	0.0	99.9	98.2	0.1	98.2	98.7	2.5	1.8	
ESTIMATED % OF TYPE												
TURBOPROP: OTHER	41	44	69	120	69	61	136	72	68	62	0	133
ESTIMATED POPULATION	D	D	C	C	D	C	0.5	D	D	A	C	
% STANDARD ERROR												
ESTIMATED % OF TYPE	19.8	21.4	33.8	58.8	33.5	29.8	68.5	35.2	32.1	30.5	0.0	64.8
TURBOPROP: TOTAL	938	4749	4712	122	5197	5101	140	5111	5105	5025	126	226
ESTIMATED POPULATION	B	A	A	C	A	C	0.6	A	A	D	D	
% STANDARD ERROR												
ESTIMATED % OF TYPE	17.6	89.0	88.3	2.3	97.4	95.6	2.6	95.8	95.6	94.1	2.4	4.2
FIXED WING-TURBOJET												
2 ENGINE TURBOJET	589	3407	3300	0	3475	3428	0	3475	3446	132	0	
ESTIMATED POPULATION	C	A	A	A	A	A	0.0	A	A	D	A	
% STANDARD ERROR	17.0	98.0	95.0	0.0	100.0	98.6	0.0	100.0	100.0	98.3	3.8	0.0
ESTIMATED % OF TYPE												
TURBOJET: OTHER	68	806	783	29	852	841	27	859	857	815	76	30
ESTIMATED POPULATION	D	A	A	D	A	A	0.0	A	A	D	D	
% STANDARD ERROR												
ESTIMATED % OF TYPE	7.6	90.7	88.1	3.2	97.0	94.6	3.0	96.6	96.4	91.7	8.6	3.4
2-80												

* * STANDARD ERROR * * CODE * *
* * GREATER LESS THAN * *-----* *
* * THAN OR EQUAL TO * *-----* *-----* *
* *-----* *-----* *-----* *-----* *-----* *-----* *-----* *-----* *-----* *-----* *-----* *-----* *-----*

TABLE 2 - 15
GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982

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AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPOUNDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	ND ILS
TURBOJET: TOTAL												
ESTIMATED POPULATION	657	4214	4084	29	4337	4268	27	4334	4332	4161	208	30
% STANDARD ERROR	C	A	D	A	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	15.1	96.6	93.6	0.7	99.4	97.8	0.6	99.3	99.3	95.3	4.8	0.7
FIXED WING: TOTAL												
ESTIMATED POPULATION	113105	106349	123918	33380	158777	79282	79893	136375	124474	111281	1163	97121
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF TYPE	47.4	44.6	51.9	14.0	66.5	33.2	33.5	57.1	52.2	46.6	0.5	40.7
ROTORCRAFT												
PISTON												
ESTIMATED POPULATION	1555	985	306	2858	987	136	4292	209	41	39	0	5065
% STANDARD ERROR	B	B	D	A	B	D	A	D	D	D	A	A
ESTIMATED % OF TYPE	29.5	18.7	5.8	54.1	18.7	2.6	81.3	4.0	0.8	0.7	0.0	95.9
TURBINE												
ESTIMATED POPULATION	954	3315	1731	236	3416	1160	1014	1793	1015	996	3	2632
% STANDARD ERROR	B	A	B	D	A	B	B	B	B	B	D	A
ESTIMATED % OF TYPE	21.5	74.8	39.0	5.3	77.1	26.2	22.9	40.5	22.9	22.5	0.1	59.4
ROTORCRAFT: TOTAL												
ESTIMATED POPULATION	2509	4300	2036	3094	4402	1296	5307	2002	1056	1035	3	7696
% STANDARD ERROR	B	A	B	A	A	B	A	B	B	B	D	A
ESTIMATED % OF TYPE	25.8	44.3	21.0	31.9	45.3	13.3	54.6	20.6	10.9	10.7	0.0	79.3

* STANDARD ERROR * CODE *
* ----- * --- *
* GREATER LESS THAN *
* THAN OR EQUAL TO *
* ----- *
* 0 % 10 % A *
* 10 % 20 % B *
* 20 % 30 % C *
* 30 % D *

TABLE 2 - 15
 GENERAL AVIATION AVIONICS EQUIPMENT
 BY
 AIRCRAFT TYPE
 1982

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	NO ILS
OTHER												
ESTIMATED POPULATION	2337	518	108	4163	204	81	6781	12	55	2	0	6920
% STANDARD ERROR	B	C	D	A	D	A	A	D	D	D	A	A
ESTIMATED % OF TYPE	33.5	7.4	1.6	59.6	2.9	1.2	97.1	0.2	0.8	0.0	0.0	99.1
TOTAL												
ESTIMATED POPULATION	117951	111167	126063	40637	163384	80658	91980	138389	125585	112317	1166	1111737
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	46.2	43.5	49.4	15.9	64.0	31.6	36.0	54.2	49.2	44.0	0.5	43.8

NOTE : COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE
*	GREATER THAN	LESS THAN	*
*	OR	*	*
*	EQUAL TO	*	*
*	-----	-----	-----
*	0 %	10 %	A
*	10 %	20 %	B
*	20 %	30 %	C
*	30 %	*	D
*	-----	-----	-----

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982

PAGE 8 OF 10

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ		
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT					
FIXED WING														
FIXED WING - PISTON														
1 ENG: 1-3 SEATS														
ESTIMATED POPULATION	30286	19267	8578	8754	1356	426	144	96	32	98	33278	A		
% STANDARD ERROR	A	A	A	A	C	D	D	D	D	D	D	A		
ESTIMATED % OF TYPE	36.9	23.5	10.4	8.2	1.7	0.5	0.2	0.1	0.0	0.1	0.1	40.5		
1 ENG: 4+ SEATS														
ESTIMATED POPULATION	47951	71482	86861	82759	42571	10470	580	5097	2488	741	4517	B		
% STANDARD ERROR	A	A	A	A	A	A	D	A	B	C	C	B		
ESTIMATED % OF TYPE	40.6	60.6	73.6	70.1	36.1	8.9	0.5	4.3	2.1	0.6	0.6	3.8		
1 ENGINE: TOTAL														
ESTIMATED POPULATION	78237	90748	95439	89513	43927	10896	724	5193	2520	839	37795	A		
% STANDARD ERROR	A	A	A	A	A	A	C	A	B	C	C	A		
ESTIMATED % OF TYPE	39.1	45.4	47.7	44.7	22.0	5.4	0.4	2.6	1.3	0.4	0.4	18.9		
2 ENG: 1-6 SEATS														
ESTIMATED POPULATION	4377	14782	17168	17599	16021	6111	282	4598	3609	787	277	D		
% STANDARD ERROR	A	A	A	A	A	A	D	A	B	C	C	D		
ESTIMATED % OF TYPE	23.7	80.0	93.0	95.3	86.7	33.1	1.5	24.9	19.5	4.3	4.3	1.5		
2 ENG: 7+ SEATS														
ESTIMATED POPULATION	2168	7867	8896	9170	8619	4549	236	4124	3049	404	370	C		
% STANDARD ERROR	B	A	A	A	A	A	D	A	A	D	D	C		
ESTIMATED % OF TYPE	21.6	78.2	88.4	91.1	85.7	45.2	2.3	41.0	30.3	4.0	4.0	3.7		

* * STANDARD ERROR * * CODE * *
* * GREATER LESS THAN * *
* * THAN OR * *
* * EQUAL TO * *
* * 0 % 10 % * A * *
* * 10 % 20 % * B * *
* * 20 % 30 % * C * *
* * 30 % * D * *
* * *****

TABLE 2 - 15

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982**

PAGE 7 OF 10

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT			
2 ENGINE: TOTAL												
ESTIMATED POPULATION	6545	22649	26064	26770	24640	10660	519	8722	6658	1191	647	
% STANDARD ERROR	A	A	A	A	A	A	C	A	A	C	C	
ESTIMATED % OF TYPE	22.9	79.4	91.4	93.8	86.4	37.4	1.8	30.6	23.3	4.2	2.3	
PISTON: OTHER												
ESTIMATED POPULATION	128	164	211	198	183	22	9	10	15	5	58	
% STANDARD ERROR	C	B	B	B	B	D	D	D	D	D	D	
ESTIMATED % OF TYPE	37.4	48.0	62.0	57.4	53.7	6.4	2.5	3.1	4.5	1.6	17.1	
PISTON: TOTAL												
ESTIMATED POPULATION	84910	113561	121714	116478	68750	21578	1251	13926	9194	2035	38500	
% STANDARD ERROR	A	A	A	A	A	A	C	A	A	B	A	
ESTIMATED % OF TYPE	37.1	49.6	53.2	50.9	30.0	9.4	0.5	6.1	4.0	0.9	16.8	
FIXED WING-TURBOPROP												
2 ENG: 1-12 SEATS												
ESTIMATED POPULATION	832	3922	4382	4486	4481	3278	529	3877	3888	659	4	
% STANDARD ERROR	B	A	A	A	A	A	C	A	A	C	D	
ESTIMATED % OF TYPE	18.5	87.3	97.6	99.9	99.9	73.0	11.8	86.4	86.6	14.7	0.1	
2 ENG: 13+ SEATS												
ESTIMATED POPULATION	144	546	640	642	620	135	211	402	458	64	0	
% STANDARD ERROR	D	A	A	A	A	D	C	B	B	D	A	
ESTIMATED % OF TYPE	22.3	85.0	99.6	99.8	96.5	21.0	32.8	62.5	71.2	10.0	0.0	

TABLE 2 - 15

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982**

PAGE 8 OF 10

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ
	VOR 200CH	VOR 100CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
2 ENGINE:												
TOTAL	975	4468	5022	5128	5101	3413	740	4279	4346	723	4	
ESTIMATED POPULATION	B	A	A	99.9	99.4	66.5	14.4	C	A	C	D	
% STANDARD ERROR	19.0	87.0	97.8					83.4	84.7	14.1	0.1	
ESTIMATED % OF TYPE												
TURBOPROP: OTHER												
TOTAL	26	52	63	73	66	4	15	34	29	0	127	
ESTIMATED POPULATION	D	D	D	D	D	D	D	D	D	A	C	
% STANDARD ERROR	12.6	25.6	30.9	35.8	32.1	1.8	7.3	16.8	14.1	0.0	61.8	
ESTIMATED % OF TYPE												
TURBOPROP: TOTAL												
ESTIMATED POPULATION	1001	4521	5085	5202	5167	3417	755	4313	4375	723	130	
% STANDARD ERROR	8	A	A	A	A	A	A	A	A	C	C	
ESTIMATED % OF TYPE	18.8	84.7	95.3	97.4	96.8	64.0	14.1	80.8	82.0	13.5	2.4	
FIXED WING-TURBOJET												
2 ENGINE TURBOJET												
TOTAL	584	3226	3226	3475	3401	1755	1728	3375	3201	888	0	
ESTIMATED POPULATION	C	A	A	A	A	B	B	A	A	B	A	
% STANDARD ERROR	16.8	92.8	92.8	100.0	97.9	50.5	49.7	97.1	92.1	25.6	0.0	
ESTIMATED % OF TYPE												
TURBOJET: OTHER												
TOTAL	152	723	847	803	805	376	782	717	679	163	27	
ESTIMATED POPULATION	D	A	A	A	A	C	A	B	B	D	D	
% STANDARD ERROR	17.1	81.4	95.3	90.3	90.8	42.3	88.0	80.6	76.4	18.3	3.0	
ESTIMATED % OF TYPE												

TABLE 2 - 15

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982**

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
TURBOJET: TOTAL												
ESTIMATED POPULATION	736	3950	4073	4278	4206	2131	2510	4092	3880	1051	27	
% STANDARD ERROR	C	A	A	A	A	B	A	A	A	B	D	
ESTIMATED % OF TYPE	16.9	90.5	93.3	98.0	96.4	48.8	57.5	93.8	88.9	24.1	0.6	
FIXED WING: TOTAL												
ESTIMATED POPULATION	86647	122032	130873	125958	78122	27127	4517	22331	17449	3809	38858	
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A	
ESTIMATED % OF TYPE	36.3	51.1	54.8	52.8	32.7	11.4	1.9	9.4	7.3	1.6	16.2	
ROTORCRAFT												
PISTON	293	2112	6	227	6	9	2	0	5	10	4667	
ESTIMATED POPULATION	D	D	0	D	D	D	D	A	D	D	A	
% STANDARD ERROR	5.5	4.0	0.1	4.3	0.1	0.2	0.0	0.0	0.1	0.2	0.2	88.4
ESTIMATED % OF TYPE												
TURBINE	727	2361	974	2643	1299	1239	352	314	560	185	677	
ESTIMATED POPULATION	C	A	B	A	B	B	D	D	C	D	C	
% STANDARD ERROR	16.4	53.3	22.0	59.6	29.3	28.0	7.9	7.1	12.6	4.2	15.3	
ESTIMATED % OF TYPE												
ROTORCRAFT: TOTAL	1020	2573	980	2870	1305	1248	354	314	565	195	5343	
ESTIMATED POPULATION	B	A	B	A	B	B	D	D	C	D	A	
% STANDARD ERROR	10.5	26.5	10.1	29.6	13.4	12.9	3.6	3.2	5.8	2.0	55.0	
ESTIMATED % OF TYPE												

TABLE 2 - 15
GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1982

AIRCRAFT TYPE	NAVIGATION EQUIPMENT											
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ	
OTHER	ESTIMATED POPULATION D	81	74	54	2	10	0	0	22	4	0	6821
	% STANDARD ERROR	D	D	D	D	D	A	A	D	D	A	A
	ESTIMATED % OF TYPE	1.2	1.1	0.8	0.0	0.1	0.0	0.0	0.3	0.1	0.0	97.6
TOTAL	ESTIMATED POPULATION A	87749	124679	131908	128829	79437	28375	4871	22668	18018	4004	50822
	% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
	ESTIMATED % OF POP	34.4	48.8	51.7	50.4	31.1	11.1	1.9	8.9	7.1	1.6	19.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE	*
*	-----	-----	-----	*
*	GREATER THAN	LESS THAN	*	*
*	-----	-----	-----	*
*	OR	OR	*	*
*	-----	-----	-----	*
*	EQUAL TO	*	*	*
*	-----	-----	-----	*
*	0 %	10 %	*	*
*	10 %	20 %	*	*
*	20 %	30 %	*	*
*	30 %	*	*	*
*	-----	-----	-----	*

TABLE 2 - 16

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982**

PAGE 1 OF 22

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MARKER BEC	GLIDE SLOPE	MLS	NO ILS
ALABAMA												
ESTIMATED POPULATION	1427	1454	1480	737	2203	962	1344	1882	1735	1388	0	1590
% STANDARD ERROR	C	C	C	C	B	C	C	B	B	C	A	C
ESTIMATED % OF STATE	40.1	40.9	41.8	20.7	61.9	27.0	37.8	52.9	48.8	39.0	0.0	44.7
ALASKA												
ESTIMATED POPULATION	5178	2013	1523	1021	1691	470	6464	1561	1311	1009	102	6471
% STANDARD ERROR	B	B	B	C	B	D	A	B	C	C	D	A
ESTIMATED % OF STATE	65.8	25.6	19.3	13.0	21.5	6.0	82.1	19.8	16.6	12.8	1.3	82.2
ARIZONA												
ESTIMATED POPULATION	2655	2450	2531	1109	3975	1816	2144	3097	2868	2458	0	2883
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	A	B
ESTIMATED % OF STATE	43.4	40.1	41.4	18.1	65.0	29.7	35.1	50.7	46.9	40.2	0.0	47.2
ARKANSAS												
ESTIMATED POPULATION	1310	1319	1454	783	1854	782	1334	1510	1317	1233	52	1620
% STANDARD ERROR	C	C	C	C	B	C	C	C	C	C	D	B
ESTIMATED % OF STATE	40.5	40.8	45.0	24.2	57.3	24.2	41.2	46.7	40.7	38.1	1.6	50.1
CALIFORNIA												
ESTIMATED POPULATION	15801	16140	18076	3459	23517	11683	9995	18990	18311	15926	131	13256
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF STATE	47.3	48.3	54.1	10.4	70.4	35.0	29.9	56.8	54.8	47.7	0.4	39.7

* STANDARD ERROR * CODE *
* GREATER THAN * ----- *
* ----- LESS THAN *----- *
* ----- EQUAL TO *----- *
* ----- 0 % 10 % A *
* ----- 10 % 20 % * B *
* ----- 20 % 30 % * C *
* ----- 30 % * D *
* ----- * * * *

TABLE 2 - 16

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982**

PAGE 2 OF 22

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	380 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	NO ILS
COLORADO												
ESTIMATED POPULATION	2278	3210	3215	979	4297	2193	1544	3309	3012	2858	2	2503
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	39.8	56.1	56.2	17.1	75.1	38.3	27.0	57.8	52.6	49.9	0.0	43.7
CONNECTICUT												
ESTIMATED POPULATION	1016	1067	1179	290	1363	804	739	1245	1171	1032	47	804
% STANDARD ERROR	C	C	C	D	C	C	C	C	C	C	D	C
ESTIMATED % OF STATE	49.6	52.0	57.5	14.1	66.5	39.2	36.1	80.7	57.1	50.3	2.3	39.2
DELAWARE												
ESTIMATED POPULATION	236	446	427	71	490	339	203	464	429	420	0	227
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	34.5	65.1	62.4	10.3	71.6	49.5	29.6	87.7	62.7	61.4	0.0	33.2
DC												
ESTIMATED POPULATION	7	152	105	0	154	148	6	144	150	144	0	10
% STANDARD ERROR	D	D	D	A	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	4.8	97.8	67.5	0.0	98.5	94.7	4.1	92.6	98.0	92.6	0.0	6.6
FLORIDA												
ESTIMATED POPULATION	6720	8280	9080	1379	10794	6198	3968	9371	8768	8232	40	5003
% STANDARD ERROR	A	A	B	A	A	A	B	A	A	A	D	B
ESTIMATED % OF STATE	45.4	56.0	61.4	9.3	73.0	41.9	26.8	83.4	59.3	55.7	0.3	33.8

*****	*	STANDARD ERROR	*	CODE	*
*****	-	GREATERTHAN	-	CODE	*
*****	*	LESS THAN	*	CODE	*
*****	*	OR	*	CODE	*
*****	*	EQUAL TO	*	CODE	*
*****	-	-----	-	-----	-----
*****	*	0 %	*	10 %	*
*****	*	10 %	*	20 %	*
*****	*	20 %	*	30 %	*
*****	*	30 %	*	40 %	*
*****	*	40 %	*	50 %	*
*****	*	50 %	*	60 %	*
*****	*	60 %	*	70 %	*
*****	*	70 %	*	80 %	*
*****	*	80 %	*	90 %	*
*****	*	90 %	*	100 %	*

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**GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982**

PAGE 3 OF 22

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LDC	MARKER BEC	GLIDE SLOPE	MLS	NO ILS
GEORGIA												
ESTIMATED POPULATION	2726	2192	2549	781	3884	1994	1674	3171	2842	2609	80	2381
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	49.1	39.5	45.9	14.1	69.9	35.9	30.1	57.1	51.2	47.0	1.4	42.8
HAWAII												
ESTIMATED POPULATION	208	290	284	53	412	185	124	226	192	162	14	307
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	38.3	53.8	49.0	9.7	76.3	34.4	22.9	41.7	35.5	30.1	2.6	56.9
IDAHO												
ESTIMATED POPULATION	1530	756	962	339	1352	467	1193	1134	1111	928	59	1334
% STANDARD ERROR	C	C	C	D	C	D	C	C	C	C	D	C
ESTIMATED % OF STATE	58.2	28.8	36.6	12.9	51.5	17.8	45.4	43.2	42.3	35.3	2.3	50.8
ILLINOIS												
ESTIMATED POPULATION	3963	4481	4702	1444	5670	2945	3756	5414	4754	4399	1	3948
% STANDARD ERROR	B	B	B	B	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	42.7	48.3	50.7	15.6	61.1	31.7	40.5	58.4	51.2	47.4	0.0	42.6
INDIANA												
ESTIMATED POPULATION	1710	1515	1871	982	2599	1276	1433	2274	1920	1763	71	1729
% STANDARD ERROR	B	C	B	C	B	C	B	B	B	B	D	B
ESTIMATED % OF STATE	42.1	37.3	46.1	24.2	64.1	31.5	35.3	56.1	47.3	43.5	1.7	42.6

*	STANDARD ERROR	*	CODE	*
*	-----	-----	-----	*
*	GREATER	LESS THAN	*	*
*	THAN	OR	*	*
*	-----	EQUAL TO	*	*
*	-----	-----	*	*
*	0 %	10 %	A	*
*	10 %	20 %	*	*
*	20 %	30 %	*	*
*	30 %	*	D	*
*	-----	-----	*	*

TABLE 2 - 16

**GENERAL AVIATION AERONAUTICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982**

PAGE 4 OF 22

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	ND COMM	4096 CODE	ALT ENC	ND TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	NO ILS
IOWA												
ESTIMATED POPULATION	1370	1952	1909	763	2470	1134	1484	2329	1983	1890	6	1604
% STANDARD ERROR	C	B	B	C	B	C	B	B	B	B	D	B
ESTIMATED % OF STATE	35.4	50.4	49.3	19.7	63.8	29.3	37.8	60.1	51.2	48.8	0.2	41.4
KANSAS												
ESTIMATED POPULATION	1552	2073	2144	750	2877	1387	1305	2356	1973	1838	8	1647
% STANDARD ERROR	B	B	B	C	B	C	C	B	B	B	D	B
ESTIMATED % OF STATE	36.4	48.6	50.3	17.6	87.5	32.1	30.8	55.3	46.3	43.1	0.2	38.6
KENTUCKY												
ESTIMATED POPULATION	869	1057	866	134	1197	797	583	973	948	843	0	781
% STANDARD ERROR	C	C	C	D	C	C	D	C	C	C	A	C
ESTIMATED % OF STATE	37.7	60.0	48.7	7.6	87.3	44.8	32.8	54.7	53.3	47.4	0.0	43.9
LOUISIANA												
ESTIMATED POPULATION	1335	1860	1613	1151	2502	1092	1613	2025	1788	1663	0	2086
% STANDARD ERROR	C	B	B	C	B	C	C	B	B	B	A	B
ESTIMATED % OF STATE	32.6	45.4	39.4	28.1	61.1	26.7	39.4	49.5	43.7	40.6	0.0	51.0
MAINE												
ESTIMATED POPULATION	580	403	457	381	438	174	861	554	330	221	1	732
% STANDARD ERROR	D	D	D	D	D	D	C	D	D	D	D	C
ESTIMATED % OF STATE	43.0	29.9	33.8	28.2	32.4	12.9	63.8	41.0	24.4	16.4	0.1	54.2

* STANDARD ERROR	* CODE	*
* -----	* -----	*
* GREATER THAN	* LESS THAN	*
* -----	* -----	*
* -----	* EQUAL TO	*
* -----	* -----	*
* 0 %	* 10 %	A
* 10 %	* 20 %	B
* 20 %	* 30 %	C
* 30 %	* D	D
* -----	* -----	*

TABLE 2 - 16
GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982

PAGE 5 OF 22

STATE	VHF COMMUNICATIONS			TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT					
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	NO ILS
MARYLAND	1190	1420	1711	558	2068	1036	891	1743	1433	1479	0	1208
ESTIMATED POPULATION	C	C	B	D	C	C	C	B	C	C	A	C
% STANDARD ERROR	39.9	47.6	57.3	18.7	69.3	35.7	29.8	58.4	48.0	49.6	0.0	40.4
ESTIMATED % OF STATE												
MASSACHUSETTS	1551	1580	1864	565	2485	1337	1111	2200	2063	1645	0	1331
ESTIMATED POPULATION	B	C	B	D	B	C	C	B	B	B	A	C
% STANDARD ERROR	44.6	45.4	53.6	16.2	71.4	38.4	31.9	63.2	59.3	47.2	0.0	38.3
ESTIMATED % OF STATE												
MICHIGAN	4191	3572	4141	1335	5031	2159	3563	4641	4254	3602	2	3828
ESTIMATED POPULATION	B	B	B	C	B	B	B	B	B	B	D	B
% STANDARD ERROR	45.3	41.2	47.7	15.4	58.0	24.9	41.1	53.5	49.0	41.5	0.0	44.1
ESTIMATED % OF STATE												
MINNESOTA	3323	1537	2090	1107	3124	1223	2726	2170	1991	1871	45	3679
ESTIMATED POPULATION	B	C	B	C	B	C	B	B	B	B	D	B
% STANDARD ERROR	56.6	26.2	35.6	18.9	53.2	20.8	48.4	37.0	33.9	31.9	0.8	62.7
ESTIMATED % OF STATE												
MISSISSIPPI	768	1110	1132	796	1260	841	1291	1212	1170	907	0	1285
ESTIMATED POPULATION	C	C	C	C	D	C	C	C	C	C	A	C
% STANDARD ERROR	31.2	45.1	46.0	32.3	51.2	26.0	52.4	49.2	47.5	36.8	0.0	52.2
ESTIMATED % OF STATE												

* * STANDARD ERROR * * CODE * *
* * GREATER LESS THAN * *
* * THAN OR * *
* * EQUAL TO * *
* *-----* *-----* *-----* *-----*
* * 0 % 10 % A * *
* * 10 % 20 % B * *
* * 20 % 30 % C * *
* * 30 % * D * *

TABLE 2 - 16
GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT				PAGE 6 OF 22
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MARKER BEC	GLIDE SLOPE	MLS	NO ILS	
MISSOURI													
ESTIMATED POPULATION	2539	1901	2637	1255	3199	1331	2202	2456	2460	2107	3	2779	
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B	
ESTIMATED % OF STATE	47.8	35.8	49.6	23.6	60.2	25.1	41.4	46.2	46.3	39.7	0.0	52.3	
MONTANA													
ESTIMATED POPULATION	1039	906	705	597	1360	297	1158	785	886	636	104	1548	
% STANDARD ERROR	C	C	C	D	C	D	C	C	D	D	D	C	
ESTIMATED % OF STATE	42.3	36.9	28.7	24.3	55.4	12.1	47.2	32.0	36.1	25.9	4.2	63.1	
NEBRASKA													
ESTIMATED POPULATION	845	769	758	815	1126	476	1223	807	658	588	0	1471	
% STANDARD ERROR	C	C	C	C	C	D	C	C	D	D	A	C	
ESTIMATED % OF STATE	36.5	33.2	32.7	35.1	48.6	20.5	52.8	34.8	28.4	25.4	0.0	63.4	
NEVADA													
ESTIMATED POPULATION	897	1073	1305	503	1704	1166	648	1304	1352	1218	0	978	
% STANDARD ERROR	C	C	C	D	B	C	D	C	C	C	A	C	
ESTIMATED % OF STATE	37.3	44.6	54.2	20.9	70.8	48.4	26.9	54.2	56.2	50.6	0.0	40.6	
NEW HAMPSHIRE													
ESTIMATED POPULATION	502	657	561	300	896	649	556	796	687	661	4	653	
% STANDARD ERROR	D	D	D	D	C	D	D	C	D	D	D	C	
ESTIMATED % OF STATE	33.9	44.3	37.8	20.2	60.4	43.7	37.5	53.7	46.3	44.6	0.3	44.1	

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 GENERAL AVIATION AVIONICS EQUIPMENT
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 1982

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	NO ILS
NEW JERSEY												
ESTIMATED POPULATION	2234	2321	2448	663	2969	1807	1855	2679	2687	2292	5	1967
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	46.3	48.1	50.7	13.7	61.5	37.4	38.4	55.5	55.7	47.5	0.1	40.8
NEW MEXICO												
ESTIMATED POPULATION	1121	1092	1426	456	1886	1097	700	1587	1380	1219	1	907
% STANDARD ERROR	C	C	D	D	B	C	C	C	C	C	D	C
ESTIMATED % OF STATE	44.8	43.6	57.0	18.2	75.3	43.8	28.0	63.4	55.1	48.7	0.0	38.2
NEW YORK												
ESTIMATED POPULATION	3496	3244	4137	1175	5349	2986	2236	4636	4179	3842	46	2758
% STANDARD ERROR	B	B	B	B	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	45.8	42.5	54.2	15.4	70.1	39.1	29.3	60.8	54.8	50.4	0.6	36.2
NORTH CAROLINA												
ESTIMATED POPULATION	1857	2086	2226	598	3273	1447	1022	2820	2296	2085	27	1475
% STANDARD ERROR	B	B	B	D	B	C	C	B	B	B	D	B
ESTIMATED % OF STATE	41.3	46.4	49.5	13.3	72.8	32.2	22.8	62.8	51.1	46.4	0.6	32.8
NORTH DAKOTA												
ESTIMATED POPULATION	733	635	816	607	1027	492	887	900	870	856	0	924
% STANDARD ERROR	C	D	C	D	C	D	C	C	C	D	A	C
ESTIMATED % OF STATE	38.1	33.1	42.5	31.6	53.4	25.6	45.1	46.8	45.3	34.2	0.0	48.1

 * STANDARD ERROR * CODE *
 * GREATER LESS THAN *-----*
 * THAN OR *-----* A *
 * EQUAL TO *-----* B *
 ----------*-----*-----*
 * 0 % 10 % * A *
 * 10 % 20 % * B *
 ----------*-----*-----*
 * 20 % 30 % * C *
 ----------*-----*-----*
 * 30 % * D *
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GENERAL AVIATION AVOINICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SV/S	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MARKER BEC	GLIDE SLOPE	MLS	NO ILS
OHIO	4727	3789	4821	1677	6521	2615	3003	5360	5104	4123	1	3927
	B	B	B	A	B	B	B	B	B	B	D	B
	50.0	40.1	51.0	17.7	68.9	27.6	31.7	56.7	54.0	43.6	0.0	41.5
OKLAHOMA	3358	2484	3229	702	4249	2467	1757	3636	2970	2780	51	2317
	B	B	B	C	B	B	B	B	B	B	D	B
	55.9	41.3	53.7	11.7	70.7	41.1	29.2	60.5	49.4	46.3	0.8	38.5
OREGON	3263	2191	2949	753	4116	1850	1778	2957	2802	2499	0	2782
	B	B	B	C	B	B	B	B	B	B	A	B
	54.5	36.6	49.3	12.6	68.8	30.9	29.7	49.4	46.9	41.8	0.0	46.5
PENNSYLVANIA	3654	3008	3870	1250	4270	2301	3271	4287	3752	3243	32	3105
	B	B	B	C	B	B	B	B	B	B	D	B
	48.1	39.6	50.9	16.4	56.2	30.3	43.0	56.4	49.4	42.7	0.4	40.9
RHODE ISLAND	203	182	155	31	214	129	126	187	173	154	6	149
	D	D	D	D	D	D	D	D	D	D	D	D
	62.9	56.3	48.1	9.6	66.2	40.0	39.1	58.1	53.8	47.8	1.8	46.2

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	NO ILS
SOUTH CAROLINA												
ESTIMATED POPULATION	1116	868	1081	157	1381	563	616	1191	1010	1022	0	807
% STANDARD ERROR	C	C	C	D	C	D	D	C	C	C	A	C
ESTIMATED % OF STATE	56.0	43.6	54.3	7.9	89.4	28.3	31.0	59.8	50.7	51.3	0.0	40.5
SOUTH DAKOTA												
ESTIMATED POPULATION	845	464	465	446	550	237	1034	497	459	361	17	1081
% STANDARD ERROR	C	D	D	D	D	D	C	D	D	D	D	C
ESTIMATED % OF STATE	53.3	29.3	29.3	28.1	34.7	14.9	65.2	31.3	29.0	22.7	1.1	68.1
TENNESSEE												
ESTIMATED POPULATION	1141	1829	2133	246	2353	1451	813	2285	2136	2072	0	870
% STANDARD ERROR	C	B	B	D	B	C	C	B	B	B	A	C
ESTIMATED % OF STATE	35.2	56.4	65.8	7.6	72.6	44.8	25.1	70.5	65.9	63.9	0.0	26.8
TEXAS												
ESTIMATED POPULATION	10022	10566	13243	4026	15806	8505	7602	13638	11751	11229	108	9525
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF STATE	42.7	45.0	56.4	17.1	87.3	36.2	32.4	58.1	50.0	47.8	0.5	40.6
UTAH												
ESTIMATED POPULATION	611	692	953	94	1059	646	317	856	748	595	0	517
% STANDARD ERROR	D	D	C	D	C	D	D	C	C	D	A	D
ESTIMATED % OF STATE	45.8	51.9	71.4	7.0	79.4	48.4	23.7	64.2	56.1	44.6	0.0	38.8

* * STANDARD ERROR * * CODE * *
* * GREATER LESS THAN * * * *
* * THAN OR EQUAL TO * * * *
* * ----- * * 10 % * * A * *
* * ----- * * 10 % * * B * *
* * 0 % * * 20 % * * * *
* * 10 % * * 30 % * * C * *
* * 20 % * * 30 % * * * *
* * 30 % * * 30 % * * D * *
* * ----- * * 30 % * * * *

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GENERAL AVIATION AVIDONICS EQUIPMENT
BY
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1982

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MARKER BEC	GLIDE SLOPE	MLS	NO ILS
VERMONT	288	214	194	99	372	175	211	254	223	210	0	327
ESTIMATED POPULATION	D	D	D	D	D	D	D	D	D	D	A	D
% STANDARD ERROR	49.3	36.7	33.1	17.0	63.7	29.9	36.2	43.5	38.2	36.0	0.0	56.0
ESTIMATED % OF STATE												
VIRGINIA	1282	1269	1134	810	1726	872	1144	1435	1333	1170	53	1427
ESTIMATED POPULATION	C	C	C	D	B	C	C	C	C	C	D	C
% STANDARD ERROR	43.4	42.9	38.4	20.8	58.4	29.5	38.7	48.6	45.1	39.6	1.8	48.3
ESTIMATED % OF STATE												
WASHINGTON	3447	2797	2646	1252	4142	1530	2944	3331	2621	2529	0	3694
ESTIMATED POPULATION	B	B	B	C	B	C	B	B	B	B	A	B
% STANDARD ERROR	49.8	40.3	38.1	18.0	59.7	22.0	42.4	48.0	37.8	38.4	0.0	53.2
ESTIMATED % OF STATE												
WEST VIRGINIA	762	523	946	88	1054	455	295	1004	910	663	0	249
ESTIMATED POPULATION	D	D	C	D	C	D	D	C	C	D	A	D
% STANDARD ERROR	57.1	39.2	70.9	6.4	79.0	34.1	22.1	75.3	68.2	49.7	0.0	18.7
ESTIMATED % OF STATE												
WISCONSIN	2507	1761	2080	1380	2631	1501	2908	2406	2218	1933	0	2860
ESTIMATED POPULATION	B	B	B	C	B	C	B	B	B	B	A	B
% STANDARD ERROR	45.3	31.8	37.6	24.9	47.6	27.1	52.6	43.5	40.1	35.0	0.0	51.7
ESTIMATED % OF STATE												

* STANDARD ERROR * CODE *
* GREATER LESS THAN *-----*
* THAN OR EQUAL TO *-----*
----------*-----*-----*
* 0 % 10 % A *
* 10 % 20 % B *
* 20 % 30 % C *
* 30 % D *

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	VHF COMMUNICATIONS			TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT					
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MARKER BEC	GLIDE SLOPE	MLS	NO ILS
WYOMING												
ESTIMATED POPULATION	622	726	502	100	939	439	439	637	806	604	19	558
% STANDARD ERROR	C	C	D	D	C	D	D	D	C	D	D	D
ESTIMATED % OF STATE	38.6	45.0	31.1	6.2	58.2	27.2	27.2	39.5	50.0	37.4	1.2	34.6
PUERTO RICO												
ESTIMATED POPULATION	150	190	148	7	212	16	69	194	166	167	0	85
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	51.3	65.2	50.6	2.5	72.6	5.3	23.7	66.3	56.8	57.2	0.0	29.2
OTHER U.S. TERRITORIES												
ESTIMATED POPULATION	23	60	55	1	85	21	12	49	46	46	3	28
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	28.0	74.9	68.9	1.3	81.1	26.6	15.1	61.1	57.8	57.8	3.9	35.1
FOREIGN												
ESTIMATED POPULATION	550	488	794	67	833	209	399	738	667	728	0	291
% STANDARD ERROR	D	D	C	D	D	D	D	C	D	C	A	D
ESTIMATED % OF STATE	47.4	42.0	68.4	5.8	54.5	18.0	34.3	63.6	57.4	62.6	0.0	25.1
TOTAL												
ESTIMATED POPULATION	117951	111167	126063	40637	163384	80658	91980	136389	125585	112317	1166	111737
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	46.2	43.5	49.4	15.9	64.0	31.6	36.0	54.2	49.2	44.0	0.5	43.8

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE	*
*	GREATER THAN	LESS THAN	*	*
*	OR EQUAL TO	*	*	*
*	-----	-----	*	*
*	0 %	10 %	*	A
*	10 %	20 %	*	B
*	20 %	30 %	*	C
*	30 %	*	*	D
*	*	*	*	*

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 GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT	DIR	RADAR ALT		
ALABAMA												
ESTIMATED POPULATION	934	1724	1733	1767	946	232	71	283	203	108	876	
% STANDARD ERROR	C	B	B	B	C	D	D	D	D	D	D	C
ESTIMATED % OF STATE	26.3	48.4	48.7	49.6	26.6	6.5	2.0	7.9	5.7	3.0	24.6	
ALASKA												
ESTIMATED POPULATION	3282	2446	1217	3259	630	45	62	77	245	0	2174	
% STANDARD ERROR	B	B	C	B	C	D	D	D	D	A	B	B
ESTIMATED % OF STATE	41.7	31.1	15.5	41.4	8.0	0.6	0.8	1.0	3.1	0.0	0.0	27.6
ARIZONA												
ESTIMATED POPULATION	2335	2876	2984	2872	1913	497	190	397	423	38	1305	
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	D	C
ESTIMATED % OF STATE	38.2	47.0	48.8	47.0	31.3	8.1	3.1	6.5	6.9	0.6	0.6	21.3
ARKANSAS												
ESTIMATED POPULATION	1109	1252	1624	1535	947	474	52	490	274	171	835	
% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	D	C
ESTIMATED % OF STATE	34.3	38.7	50.2	47.4	29.3	14.7	1.6	15.2	8.5	5.3	5.3	25.8
CALIFORNIA												
ESTIMATED POPULATION	12166	17110	18720	16585	9859	2404	292	2244	1644	356	5599	
% STANDARD ERROR	A	A	A	A	A	B	D	B	B	B	D	A
ESTIMATED % OF STATE	36.4	51.2	56.0	49.6	29.5	7.2	0.9	6.7	4.9	1.1	1.1	16.8

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**GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT								FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR		
COLORADO										
ESTIMATED POPULATION	1444	3251	3190	3059	1969	960	20	686	300	69
% STANDARD ERROR	B	B	B	B	B	C	D	C	D	C
ESTIMATED % OF STATE	25.2	56.8	55.8	53.5	34.4	16.8	0.4	12.0	5.2	1.2
CONNECTICUT										
ESTIMATED POPULATION	644	1242	1130	1111	731	226	116	355	290	95
% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D
ESTIMATED % OF STATE	31.4	60.6	55.1	54.2	35.6	11.0	5.7	17.3	14.1	4.6
DELAWARE										
ESTIMATED POPULATION	185	412	423	367	331	183	43	82	84	39
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	27.0	60.1	61.8	53.5	48.4	26.7	6.3	12.0	12.3	5.7
DC										
ESTIMATED POPULATION	2	149	148	149	143	104	27	103	27	0
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	1.4	95.3	94.7	95.4	91.9	66.9	17.2	66.2	17.2	0.0
FLORIDA										
ESTIMATED POPULATION	4720	9088	9397	8919	5163	2366	517	2068	1185	373
% STANDARD ERROR	B	A	A	B	B	B	D	B	C	D
ESTIMATED % OF STATE	31.9	61.5	63.5	60.3	34.9	16.0	3.5	14.0	8.0	2.5

*	STANDARD ERROR	*	CODE	*
*	GREATERTHAN THAN	LESS THAN OR EQUAL TO	*	*
*	0%	10%	A	*
*	10%	20%	B	*
*	20%	30%	C	*
*	30%	*	D	*

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STATE	NAVIGATION EQUIPMENT									
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT	FLT MGT COMPTR
GEORGIA										
ESTIMATED POPULATION	2042	2417	2737	2954	1573	926	67	436	351	89
% STANDARD ERROR	B	B	B	B	B	C	D	D	D	C
ESTIMATED % OF STATE	36.8	43.5	49.3	53.2	28.3	16.7	1.2	7.8	6.3	1.6
HAWAII										
ESTIMATED POPULATION	137	296	251	255	114	17	28	27	24	16
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	25.4	55.0	46.5	47.3	21.1	3.2	5.1	4.9	4.5	3.0
IDAHO										
ESTIMATED POPULATION	1194	855	919	1320	415	154	68	90	151	12
% STANDARD ERROR	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	45.4	32.6	35.0	50.2	15.8	5.9	2.6	3.4	5.8	0.4
ILLINOIS										
ESTIMATED POPULATION	3238	4477	5164	4789	3092	922	189	822	959	215
% STANDARD ERROR	B	B	B	B	B	C	D	C	D	B
ESTIMATED % OF STATE	34.9	48.3	55.7	51.6	33.3	9.9	2.0	8.9	10.3	2.3
INDIANA										
ESTIMATED POPULATION	1332	1753	2023	2039	1291	288	32	174	174	26
% STANDARD ERROR	C	B	B	B	C	D	D	D	D	C
ESTIMATED % OF STATE	32.8	43.2	49.9	50.3	31.8	7.1	0.8	4.3	4.3	0.6

* STANDARD ERROR *
* GREATER LESS THAN *
* THAN OR *
* * 0 % 10 % * A *
* * 10 % 20 % * B *
* * 20 % 30 % * C *
* * 30 % * D *

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STATE	NAVIGATION EQUIPMENT						RADAR ALT	FLTNGT CDMTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV			
IOWA	1373	1830	1936	1998	890	353	6	227	183
	C	B	B	C	0	0	0	D	D
	35.4	47.2	50.0	51.6	23.0	9.1	0.2	5.9	4.7
KANSAS	977	2583	2308	1377	745	7	271	239	2
	C	B	B	C	0	0	0	D	D
	22.9	60.6	54.1	55.1	32.3	17.5	0.2	6.4	5.6
KENTUCKY	708	882	935	942	649	205	13	164	134
	D	C	C	C	0	0	0	D	D
	39.8	49.6	52.6	53.0	36.5	11.5	0.7	9.3	7.5
LOUISIANA	1014	1683	1609	2219	1478	592	105	464	495
	C	B	B	C	0	0	0	D	D
	24.8	41.1	39.3	54.2	36.1	14.5	2.6	11.3	12.1
MAINE	523	468	476	447	140	88	2	31	59
	D	D	D	D	0	0	0	D	A
	38.7	34.6	35.3	33.1	10.4	6.5	0.1	2.3	4.3

* * STANDARD ERROR * * CODE * *
* * GREATER THAN LESS THAN * * --- * *
* * * * OR EQUAL TO * * * * A * *
* * * * 0 % 10 % * * B * *
* * * * 10 % 20 % * * C * *
* * * * 20 % 30 % * * D * *
* * * * 30 % * * * *

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT			
MARYLAND												
ESTIMATED POPULATION	794	1663	1810	1617	1084	385	6	278	261	12	615	
% STANDARD ERROR	C	B	C	C	D	D	D	D	D	D	D	
ESTIMATED % OF STATE	26.6	55.7	60.6	54.2	36.3	12.9	0.2	9.3	8.7	0.4	20.6	
MASSACHUSETTS												
ESTIMATED POPULATION	1186	2097	1998	1992	979	302	184	100	343	1	700	
% STANDARD ERROR	C	B	B	C	D	D	D	D	D	D	C	
ESTIMATED % OF STATE	34.1	60.2	57.4	57.2	28.1	8.7	5.3	2.9	9.8	0.0	20.1	
MICHIGAN												
ESTIMATED POPULATION	2696	4497	4468	3953	2667	1102	5	642	562	166	1891	
% STANDARD ERROR	B	B	B	B	B	C	D	D	D	D	B	
ESTIMATED % OF STATE	31.1	51.8	51.5	45.6	30.7	12.7	0.1	7.4	6.5	1.9	19.5	
MINNESOTA												
ESTIMATED POPULATION	2637	2137	2179	2384	1484	482	51	553	437	94	1136	
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	B	
ESTIMATED % OF STATE	44.9	36.4	37.1	40.3	25.3	8.2	0.9	9.4	7.4	1.6	19.4	
MISSISSIPPI												
ESTIMATED POPULATION	815	1052	1092	1052	790	326	68	255	174	91	866	
% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	C	
ESTIMATED % OF STATE	33.1	42.7	44.3	42.7	32.1	13.3	2.8	10.3	7.1	3.7	35.1	

*	STANDARD ERROR	*	CODE	*
*	-----	*	-----	*
*	GREATER THAN	LESS THAN	*	*
*	-----	OR	*	*
*	-----	EQUAL TO	*	*
*	-----	-----	*	*
*	0 %	10 %	A	*
*	10 %	20 %	B	*
*	20 %	30 %	C	*
*	30 %	*	D	*

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GENERAL AVIATION AIVONICS EQUIPMENT
BY
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1982

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STATE	NAVIGATION EQUIPMENT										NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	
MISSOURI ESTIMATED POPULATION	1982	2404	2700	2323	1427	351	68	314	300	8	1237
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	C
ESTIMATED % OF STATE	37.3	45.2	50.8	43.7	26.9	6.6	1.3	5.9	5.6	0.1	23.3
MONTANA ESTIMATED POPULATION	999	777	768	841	374	165	0	33	143	82	751
% STANDARD ERROR	C	C	C	C	D	D	A	D	D	D	C
ESTIMATED % OF STATE	40.7	31.7	31.3	34.3	15.2	6.7	0.0	1.3	5.8	3.4	30.6
NEBRASKA ESTIMATED POPULATION	658	835	797	824	479	274	57	187	123	6	876
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D	C
ESTIMATED % OF STATE	28.4	36.0	34.4	35.5	20.7	11.8	2.5	8.1	5.3	0.3	37.8
NEVADA ESTIMATED POPULATION	822	1053	1295	1248	1081	397	52	281	148	100	556
% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	34.1	43.8	53.8	51.9	44.1	16.5	2.2	11.7	6.2	4.1	23.1
NEW HAMPSHIRE ESTIMATED POPULATION	335	777	604	802	848	279	10	10	56	0	348
% STANDARD ERROR	D	D	D	C	D	D	D	D	D	A	D
ESTIMATED % OF STATE	22.6	52.4	40.8	54.1	43.6	18.8	0.7	0.7	3.8	0.0	23.4

* * STANDARD ERROR * * CODE * *
* * GREATER LESS THAN * * ----- * *
* * THAN OR * * ----- * * ----- * *
* * ----- EQUAL TO * * ----- * * ----- * *
* * ----- 0 % 10 % * * A * *
* * ----- 10 % 20 % * * B * *
* * ----- 20 % 30 % * * C * *
* * ----- 30 % * * D * *

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982**

STATE	NAVIGATION EQUIPMENT						FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV		
NEW JERSEY								
ESTIMATED POPULATION	1364	2992	2758	2645	1665	836	295	799
% STANDARD ERROR	C	B	B	B	B	C	D	C
ESTIMATED % OF STATE	28.3	62.0	57.1	54.8	34.5	17.3	6.1	16.6
NEW MEXICO								
ESTIMATED POPULATION	912	1252	1450	1321	975	462	2	379
% STANDARD ERROR	C	C	C	C	C	D	D	D
ESTIMATED % OF STATE	36.5	50.0	57.9	52.8	39.0	18.5	0.1	15.1
NEW YORK								
ESTIMATED POPULATION	2391	3932	4598	4032	2464	928	181	739
% STANDARD ERROR	B	B	B	B	B	C	D	D
ESTIMATED % OF STATE	31.3	51.6	60.3	52.9	32.3	12.2	2.4	9.7
NORTH CAROLINA								
ESTIMATED POPULATION	1581	2109	2441	2255	1576	705	53	613
% STANDARD ERROR	C	B	B	B	B	C	D	D
ESTIMATED % OF STATE	35.2	46.9	54.3	50.2	35.1	15.7	1.2	13.6
NORTH DAKOTA								
ESTIMATED POPULATION	613	677	766	769	523	127	3	167
% STANDARD ERROR	D	D	D	C	D	D	0	D
ESTIMATED % OF STATE	31.9	35.2	39.9	40.0	27.2	6.6	0.2	8.7

* * STANDARD ERROR * * CODE * *
* * GREATER LESS THAN * * --- * *
* * THAN OR * * --- * * A * *
* * ----- EQUAL TO * * --- * *
* * 0 % 10 % * * B * *
* * 10 % 20 % * * C * *
* * 20 % 30 % * * D * *
* * 30 % * * * *

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT									FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT		
OHIO ESTIMATED POPULATION	3226	4736	4959	5261	3104	1094	372	1079	757	162	1903
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF STATE	34.1	50.1	52.4	55.6	32.8	11.6	3.9	11.4	8.0	1.7	20.1
OKLAHOMA ESTIMATED POPULATION	2682	2592	3211	3219	2327	1035	270	874	460	320	1066
% STANDARD ERROR	B	B	B	B	B	C	D	C	D	D	C
ESTIMATED % OF STATE	44.6	43.1	53.4	53.6	38.7	17.2	4.5	14.5	7.7	5.3	17.7
OREGON ESTIMATED POPULATION	2663	2345	2854	2981	2032	540	3	415	414	110	1078
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	C
ESTIMATED % OF STATE	44.5	39.2	47.7	49.8	34.0	9.0	0.0	6.9	6.9	1.8	18.0
PENNSYLVANIA ESTIMATED POPULATION	2328	3918	3860	3512	2418	817	138	900	494	6	1454
% STANDARD ERROR	B	B	B	B	B	C	D	C	D	D	B
ESTIMATED % OF STATE	30.6	51.6	50.8	46.2	31.8	10.8	1.8	11.8	6.5	0.1	19.1
RHODE ISLAND ESTIMATED POPULATION	143	170	188	174	116	73	3	73	11	0	71
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	44.4	52.6	58.2	53.9	35.9	22.7	1.0	22.7	3.3	0.0	22.0

* * STANDARD ERROR * * CODE * *
* * ----- * * ----- * * ----- * *
* * GREATER LESS THAN * *-----* *
* * THAN OR EQUAL TO * *-----* *
* * ----- * *-----* *-----* *-----* *
* * 0 % 10 % A * *-----* *-----* *
* * 10 % 20 % B * *-----* *-----* *
* * 20 % 30 % C * *-----* *-----* *
* * 30 % D * *-----* *-----* *-----* *
* *-----* *-----* *-----* *-----* *-----* *

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1982

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STATE	NAVIGATION EQUIPMENT						FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV		
SOUTH CAROLINA								
ESTIMATED POPULATION	812	1201	1194	1080	666	352	4	181
% STANDARD ERROR	C	C	C	C	D	D	D	D
ESTIMATED % OF STATE	40.8	60.3	60.0	54.3	33.4	17.7	0.2	9.1
SOUTH DAKOTA								
ESTIMATED POPULATION	666	485	480	480	285	67	14	21
% STANDARD ERROR	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	42.0	30.6	30.3	29.0	18.0	4.2	0.9	1.3
TENNESSEE								
ESTIMATED POPULATION	849	2068	2156	1998	1451	589	1	314
% STANDARD ERROR	C	B	B	B	C	D	D	A
ESTIMATED % OF STATE	26.2	63.8	66.5	61.6	44.8	18.2	0.0	9.7
TEXAS								
ESTIMATED POPULATION	7676	11695	13546	12829	8786	3347	656	2726
% STANDARD ERROR	A	A	A	A	B	C	B	D
ESTIMATED % OF STATE	32.7	49.8	57.7	54.6	37.4	14.3	2.8	11.6
UTAH								
ESTIMATED POPULATION	515	759	943	842	407	44	2	74
% STANDARD ERROR	D	C	C	D	D	D	D	D
ESTIMATED % OF STATE	38.6	56.9	70.7	63.1	30.5	3.3	0.1	5.5

* * STANDARD ERROR * * CODE * *
* * ----- * * --- * *
* * GREATER LESS THAN * *
* * THAN OR * *
* * ----- EQUAL TO * *
* * 0 % 10 % * A * *
* * 10 % 20 % * B * *
* * 20 % 30 % * C * *
* * 30 % * D * *
* * *****

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT									
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR
VERMONT										
ESTIMATED POPULATION	188	216	199	223	138	81	2	32	38	1
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	187
ESTIMATED % OF STATE	32.2	37.0	34.1	38.1	23.3	10.4	0.3	5.5	6.5	D
VIRGINIA										
ESTIMATED POPULATION	869	1391	1273	1239	691	196	19	115	104	0
% STANDARD ERROR	C	C	C	C	C	D	D	D	A	704
ESTIMATED % OF STATE	29.4	47.1	43.1	41.9	23.4	6.6	0.6	3.9	3.5	C
WASHINGTON										
ESTIMATED POPULATION	2238	3175	2708	2742	1635	533	30	408	258	44
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	1839
ESTIMATED % OF STATE	32.2	45.7	39.0	39.5	23.5	7.7	0.4	5.9	3.7	B
WEST VIRGINIA										
ESTIMATED POPULATION	468	780	950	845	636	121	2	76	81	3
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	107
ESTIMATED % OF STATE	35.1	58.5	71.2	63.4	47.7	9.1	0.1	5.7	6.0	D
WISCONSIN										
ESTIMATED POPULATION	2188	2022	2492	2446	1408	581	45	442	328	66
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	1332
ESTIMATED % OF STATE	39.6	36.6	45.1	44.2	25.4	10.5	0.8	8.0	5.9	C
										24.1

**GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT						RADAR ALT	FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV			
WYOMING									
ESTIMATED POPULATION	455	792	702	693	429	183	17	166	103
% STANDARD ERROR	D	C	C	C	D	D	D	D	D
ESTIMATED % OF STATE	28.2	49.1	43.6	43.0	26.6	11.4	1.1	10.3	6.4
PUERTO RICO									
ESTIMATED POPULATION	145	142	141	215	20	6	1	1	0
% STANDARD ERROR	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	49.5	48.5	48.4	73.5	6.8	2.2	0.4	0.4	0.0
OTHER U.S. TERRITORIES									
ESTIMATED POPULATION	18	62	55	65	26	3	0	5	3
% STANDARD ERROR	D	D	D	D	D	D	A	D	A
ESTIMATED % OF STATE	22.3	76.8	68.9	80.4	32.3	3.8	0.0	6.7	3.8
FOREIGN									
ESTIMATED POPULATION	218	732	564	827	336	17	34	98	89
% STANDARD ERROR	D	C	D	C	D	D	D	D	D
ESTIMATED % OF STATE	18.7	63.0	48.6	71.2	29.0	1.4	2.9	8.5	7.7
TOTAL									
ESTIMATED POPULATION	87749	124679	131906	128829	79437	28375	4871	22668	18018
% STANDARD ERROR	A	A	A	A	A	A	A	A	B
ESTIMATED % OF POP	34.4	48.8	51.7	50.4	31.1	11.1	1.9	8.9	7.1

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE	*
*	-----	-----	-----	*
*	GREATERTHAN	LESS THAN	*	*
*	-----	-----	*	*
*	EQUAL TO	*	*	*
*	-----	-----	*	*
*	0 %	10 %	A	*
*	10 %	20 %	B	*
*	20 %	30 %	C	*
*	30 %	*	D	*
*	-----	*	*	*

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**GENERAL AVIATION AVIONICS EQUIPMENT
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REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	NO ILS
ALASKAN												
ESTIMATED POPULATION	5178	2013	1523	1021	1691	470	6464	1561	1311	1009	102	6471
% STANDARD ERROR	B	B	C	B	B	D	A	B	C	C	D	A
ESTIMATED % OF REGION	65.8	25.6	19.3	13.0	21.5	6.0	82.1	19.8	16.6	12.8	1.3	82.2
CENTRAL												
ESTIMATED POPULATION	6306	6695	7448	3583	9672	4309	6194	7948	7074	6423	16	7500
% STANDARD ERROR	A	A	A	B	A	B	A	A	A	A	D	A
ESTIMATED % OF REGION	40.0	42.5	47.2	22.7	61.3	27.3	39.3	50.4	44.9	40.7	0.1	47.6
EASTERN												
ESTIMATED POPULATION	12862	12382	14778	4412	18078	9974	9901	16393	14873	13254	136	10850
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	45.7	44.0	52.5	15.7	64.2	35.4	35.1	58.2	52.8	47.1	0.5	38.9
EUROPEAN OFFICE												
ESTIMATED POPULATION	282	168	380	15	184	154	243	376	305	373	0	51
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF REGION	53.5	31.9	72.1	2.8	34.8	29.2	46.1	71.2	57.8	70.7	0.0	9.7
GREAT LAKES												
ESTIMATED POPULATION	21999	17754	20987	8979	27153	12447	19289	23661	21569	18708	137	21976
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	47.4	38.3	45.3	19.4	58.6	26.8	41.6	51.0	46.5	40.3	0.3	47.4
NEW ENGLAND												
ESTIMATED POPULATION	4141	4104	4409	1666	5768	3267	3605	5236	4647	3923	57	3997
% STANDARD ERROR	B	B	B	B	B	B	B	B	B	B	D	B
ESTIMATED % OF REGION	44.7	44.3	47.6	18.0	62.2	35.2	38.9	56.5	50.1	42.3	0.6	43.1

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**GENERAL AVIATION AVIONICS EQUIPMENT
BY
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REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	NO ILS
NORTHWEST MT												
ESTIMATED POPULATION	12790	11278	11931	4114	17265	7423	9374	13010	11987	10647	184	12936
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	47.9	42.3	44.7	15.4	64.7	27.8	35.1	48.8	44.9	39.9	0.7	48.5
SOUTHERN												
ESTIMATED POPULATION	16649	19258	20863	4690	26774	14107	11466	23308	21277	19527	150	14366
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	43.2	50.0	54.2	12.7	59.5	36.6	29.8	60.5	55.3	50.7	0.4	37.3
SOUTHWESTERN												
ESTIMATED POPULATION	17180	17517	21161	7117	26493	13980	13006	22592	19402	18321	212	16455
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	43.5	44.3	53.5	18.0	67.0	35.4	32.9	57.2	49.1	46.4	0.5	41.6
WESTERN-PACIFIC												
ESTIMATED POPULATION	19744	19955	22275	5123	29710	14852	12993	23623	22729	19768	145	17603
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	46.3	46.8	52.2	12.0	69.7	34.8	30.5	55.4	53.3	46.4	0.3	41.3
TOTAL												
ESTIMATED POPULATION	117951	111167	126063	40637	163384	80658	91980	138389	125585	112317	1166	111737
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	46.2	43.5	49.4	15.9	64.0	31.6	36.0	54.2	49.2	44.0	0.5	43.8

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

* STANDARD ERROR * CODE *
* ----- * --- *
* GREATER LESS THAN * *
* THAN OR * *
* ----- EQUAL TO * *
* ----- * *
* 0 % 10 % A *
* 10 % 20 % B *
* 20 % 30 % C *
* 30 % 40 % D *
* ----- * *

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**GENERAL AVIATION AVIONICS EQUIPMENT
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REGION	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
ALASKAN ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	3282 B 41.7	2446 B 31.1	1217 C 15.5	3258 B 41.4	630 C 8.0	45 D 0.6	62 D 0.8	77 D 1.0	245 D 3.1	0 A 0.0	2174 B 27.6	
CENTRAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	4990 B 31.6	7652 A 48.5	7741 A 49.1	7493 A 47.5	4173 B 26.5	1723 B 10.9	138 D 0.9	1000 C 6.3	845 C 5.4	17 D 0.1	3750 B 23.8	
EASTERN ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	8400 A 29.8	15237 A 54.1	15819 A 56.2	14406 A 51.1	9434 A 33.5	3571 B 12.7	710 C 2.5	3092 B 11.0	2005 B 7.1	442 D 1.6	5242 A 18.6	
EUROPEAN OFFICE ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	16 D 3.0	387 D 73.4	310 D 58.7	392 D 74.3	268 D 50.8	6 D 1.1	0 A 0.0	62 D 11.8	52 D 9.9	3 D 0.6	21 D 4.0	
GREAT LAKES ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	16596 A 35.8	20783 A 44.8	22531 A 48.6	22081 A 47.6	13852 A 29.9	4663 B 10.1	710 C 1.5	3899 B 8.4	3268 B 7.0	796 C 1.7	10123 A 21.8	
NEW ENGLAND ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	3019 B 32.6	4969 B 53.6	4596 B 49.6	4748 B 51.2	2748 B 29.6	1030 C 11.1	317 D 3.4	601 D 6.5	796 C 8.6	97 D 1.0	2118 B 22.8	

* * STANDARD ERROR * * CODE *
* * GREATER LESS THAN * * --- *
* * THAN OR EQUAL TO * * --- *
* * 0 % 10 % * * A *
* * 10 % 20 % * * B *
* * 20 % 30 % * * C *
* * 30 % * * D *
* * *****

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**GENERAL AVIATION AVIONICS EQUIPMENT
BY
REGION OF BASED AIRCRAFT
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REGION	NAVIGATION EQUIPMENT										NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	
NORTHWEST MT. ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	9508 A	11954 A	12083 A	12478 A	7263 B	2580 B	141 D	1871 B	1420 B	340 D	5614 A
	35.6	44.8	45.3	45.8	27.2	9.7	0.5	7.0	5.3	1.3	21.0
SOUTHERN ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	12642 A	20891 A	22002 A	21395 A	12886 A	5721 A	794 C	4324 B	2801 B	872 C	6254 A
	32.8	54.3	57.2	55.6	33.5	14.9	2.1	11.2	7.3	2.3	16.2
SOUTHWESTERN ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	13394 A	18670 A	21475 A	21319 A	14549 A	5910 A	1117 C	4965 A	4443 B	800 B	8423 A
	33.9	47.2	54.3	53.9	36.8	15.0	2.8	12.6	11.2	2.0	21.3
WESTERN-PACIFIC ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF REGION	15644 A	21337 A	23348 A	21031 A	12954 A	3316 B	563 C	2948 B	2241 B	510 C	7576 A
	36.7	50.0	54.7	49.3	30.4	7.8	1.3	6.9	5.3	1.2	17.8
TOTAL											
% ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF POP	87749 A	124679 A	131908 A	128829 A	79437 A	28375 A	4871 A	22668 A	18018 A	4004 B	50822 A
	34.4	48.8	51.7	50.4	31.1	11.1	1.9	8.9	7.1	1.6	19.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE	*
*	GREATER THAN	LESS THAN	*	*
*	OR	*	*	*
*	EQUAL TO	*	*	*
*	-----	-----	-----	-----
*	0 %	10 %	*	A
*	10 %	20 %	*	*
*	20 %	30 %	*	B
*	30 %	*	*	C
*		*	*	D
*		*	*	*

TABLE 2 - 18

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1982**

PAGE 1 OF 6

PRIMARY USE	VHF COMMUNICATIONS			TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT					
	350 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	NO ILS
EXECUTIVE												
ESTIMATED POPULATION	4032	13609	13768	12	16165	14046	246	15228	14810	14253	359	1098
% STANDARD ERROR	B	A	D	A	A	D	A	A	A	D	D	B
ESTIMATED % OF USE	25.6	86.5	87.5	0.1	102.7	89.2	1.6	96.8	94.1	90.6	2.3	7.0
BUSINESS												
ESTIMATED POPULATION	23315	30024	37730	816	45236	27388	4425	40168	39323	36548	308	8440
% STANDARD ERROR	A	A	C	A	A	B	A	A	A	D	D	A
ESTIMATED % OF USE	48.7	62.7	78.8	1.7	94.5	57.2	9.2	83.9	82.1	76.3	0.6	17.6
PERSONAL												
ESTIMATED POPULATION	60078	34589	46069	11665	59961	19509	39895	47541	42236	34524	281	49321
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF USE	63.4	36.5	48.6	12.3	63.2	20.6	42.1	50.1	44.5	36.4	0.3	52.0
INSTRUCTIONAL												
ESTIMATED POPULATION	6870	8463	42226	912	10623	2602	5027	8000	4660	4550	7	7479
% STANDARD ERROR	A	A	B	C	A	B	B	A	B	B	D	A
ESTIMATED % OF USE	46.7	57.5	28.7	6.2	72.2	17.7	34.2	54.4	31.7	30.9	0.0	50.9
AERIAL APPLICATION												
ESTIMATED POPULATION	869	915	695	5726	760	205	6707	629	583	584	2	6834
% STANDARD ERROR	C	C	A	C	C	D	A	C	C	C	D	A
ESTIMATED % OF USE	12.2	12.8	9.7	80.0	10.6	2.9	93.7	8.8	8.2	8.2	0.0	95.5

TABLE 2 - 18

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1982**

PAGE 2 OF 6

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	NO ILS
AERIAL OBSERVATION												
ESTIMATED POPULATION	2017	2053	2038	515	2926	1480	1571	2027	1473	1355	0	2469
% STANDARD ERROR	B	B	B	D	B	C	B	B	B	C	A	B
ESTIMATED % OF USE	48.4	49.3	49.0	12.4	70.3	35.5	37.7	48.7	35.4	32.5	0.0	59.3
OTHER WORK USE												
ESTIMATED POPULATION	679	700	423	514	733	268	1137	344	304	293	0	1521
% STANDARD ERROR	C	C	D	D	C	D	C	D	D	D	A	B
ESTIMATED % OF USE	39.1	40.4	24.4	29.6	42.3	15.5	65.6	19.8	17.5	16.9	0.0	87.8
COMMUTER AIR CARRIER												
ESTIMATED POPULATION	385	783	951	0	1058	828	63	1060	1004	1004	0	60
% STANDARD ERROR	D	C	C	A	B	C	D	B	B	C	A	D
ESTIMATED % OF USE	36.0	73.1	88.8	0.0	98.8	77.3	5.9	99.1	93.8	93.8	0.0	5.6
AIR TAXI												
ESTIMATED POPULATION	2119	6672	6043	178	7119	5598	1407	6766	6134	6198	0	1758
% STANDARD ERROR	B	A	A	D	A	A	B	A	A	A	A	B
ESTIMATED % OF USE	26.1	82.1	74.4	2.2	87.7	68.9	17.3	83.3	75.5	76.3	0.0	21.7
OTHER												
ESTIMATED POPULATION	1420	2599	2388	874	3079	1986	1694	2862	2349	2293	18	2104
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF USE	31.2	57.2	52.5	19.2	67.7	43.7	37.3	58.6	51.7	50.4	0.4	46.3

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* STANDARD ERROR * CODE *
* ----- * ----- *
* GREATER LESS THAN *
* THAN OR *
* ----- EQUAL TO *
* ----- *
* 0 % 10 % A *
* ----- *
* 10 % 20 % B *
* ----- *
* 20 % 30 % C *
* ----- *
* 30 % D *
* ----- *

TABLE 2 - 18
GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1982

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MARKER BEC	GLIDE SLOPE	MLS	NO ILS
RENTAL												
ESTIMATED POPULATION	3003	6909	6295	488	8899	4748	1219	7687	6956	8850	0	2329
% STANDARD ERROR	B	A	D	A	A	B	B	A	A	A	A	B
ESTIMATED % OF USE	30.5	70.2	63.9	5.0	90.4	48.2	12.4	78.1	70.7	67.5	0.0	23.7
INACTIVE												
ESTIMATED POPULATION	13226	4213	5486	18842	7105	2317	28308	6472	5651	4059	149	28209
% STANDARD ERROR	A	A	A	A	A	B	A	A	A	D	A	A
ESTIMATED % OF USE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL												
ESTIMATED POPULATION	117951	111167	126063	40637	163384	80658	91980	138389	125585	112317	1166	111737
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	46.2	43.5	49.4	15.9	64.0	31.6	36.0	54.2	49.2	44.0	0.5	43.8

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE	*
*	GREATERTHAN	LESS THAN	*	*
*	OR	OR	*	*
*	EQUAL TO	*	*	*
*	0 %	10 %	A	*
*	10 %	20 %	B	*
*	20 %	30 %	C	*
*	30 %	*	D	*

TABLE 2 - 18

**GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1982**

PAGE 4 OF 6

PRIMARY USE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
EXECUTIVE											
ESTIMATED POPULATION	3556	13538	14801	15465	14262	8171	3042	9673	8159	1863	195
% STANDARD ERROR	B	A	A	A	A	A	A	A	A	B	D
ESTIMATED % OF USE	22.6	86.0	92.8	98.3	90.6	51.9	19.3	61.5	51.8	11.8	1.2
BUSINESS											
ESTIMATED POPULATION	17620	33602	40749	40647	29546	10068	652	7033	4969	1171	1272
% STANDARD ERROR	A	A	A	A	A	A	C	A	A	C	C
ESTIMATED % OF USE	36.8	70.2	85.1	84.9	61.7	21.0	1.4	14.7	10.4	2.4	2.7
PERSONAL											
ESTIMATED POPULATION	42984	44649	48393	41380	19028	4210	213	1637	1273	266	16491
% STANDARD ERROR	A	A	A	A	A	B	D	B	C	D	A
ESTIMATED % OF USE	45.3	47.1	51.0	43.8	20.1	4.4	0.2	1.7	1.3	0.3	17.4
INSTRUCTIONAL											
ESTIMATED POPULATION	6436	8062	4760	5098	1777	353	44	144	130	79.	1374
% STANDARD ERROR	A	A	B	B	B	D	D	D	D	D	B
ESTIMATED % OF USE	43.8	54.8	32.4	34.6	12.1	2.4	0.3	1.0	0.9	0.5	9.3
AERIAL APPLICATION											
ESTIMATED POPULATION	489	633	466	691	217	9	5	5	0	0	6302
% STANDARD ERROR	D	C	D	C	D	D	D	D	A	A	A
ESTIMATED % OF USE	6.8	8.9	6.5	9.7	3.0	0.1	0.1	0.1	0.0	0.0	88.1

* STANDARD ERROR * CODE *
* GREATER LESS THAN * ----- *
* THAN OR EQUAL TO *-----*
* 0 % 10 % A *
* 10 % 20 % B *
* 20 % 30 % C *
* 30 % D *
* *****

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**GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1982**

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PRIMARY USE	NAVIGATION EQUIPMENT								FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR		
AERIAL OBSERVATION										
ESTIMATED POPULATION	1736	1732	1555	2258	1029	232	76	223	262	64
% STANDARD ERROR	B	B	B	C	D	D	D	D	D	C
ESTIMATED % OF USE	41.7	41.6	37.3	54.2	24.7	5.6	1.8	5.4	6.3	1.5
OTHER WORK USE										
ESTIMATED POPULATION	332	477	358	362	181	17	9	8	82	5
% STANDARD ERROR	C	C	D	D	D	D	D	D	D	C
ESTIMATED % OF USE	19.2	27.5	20.6	20.9	10.4	1.0	0.5	0.4	4.8	0.3
COMMUTER AIR CARRIER										
ESTIMATED POPULATION	157	947	972	943	938	283	48	214	311	0
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D
ESTIMATED % OF USE	14.7	88.5	90.8	88.1	87.6	26.4	4.5	20.0	29.1	0.0
AIR TAXI										
ESTIMATED POPULATION	1715	6117	5541	7114	5153	2385	318	1906	1569	175
% STANDARD ERROR	B	A	A	A	A	B	D	B	B	C
ESTIMATED % OF USE	21.1	75.3	68.2	87.6	63.5	29.4	3.9	23.5	19.3	2.2
OTHER										
ESTIMATED POPULATION	694	2383	2089	2402	2138	1226	259	933	869	234
% STANDARD ERROR	C	B	B	B	B	B	D	C	D	B
ESTIMATED % OF USE	15.3	52.4	45.9	52.8	47.0	27.0	5.7	20.5	19.1	5.1

*	STANDARD ERROR	*	CODE	*
*	-----	*	-----	*
*	GREATERTHAN	LESS THAN	OR	*
*	-----	*	EQUAL TO	*
*	-----	*	-----	*
*	0 %	10 %	A	*
*	10 %	20 %	B	*
*	20 %	30 %	C	*
*	30 %	40 %	D	*

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**GENERAL AVIATION AVIDONICS EQUIPMENT
BY
PRIMARY USE
1982**

PAGE 6 OF 6

PRIMARY USE	NAVIGATION EQUIPMENT						RADAR ALT	FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV			
RENTAL									
ESTIMATED POPULATION	1834	7924	6908	6788	2774	874	0	453	47
% STANDARD ERROR	B	A	A	B	B	C	A	D	22
ESTIMATED % OF USE	18.6	80.5	70.2	69.0	28.2	8.9	0.0	4.6	488
								0.5	C
								0.2	5.0
INACTIVE									
ESTIMATED POPULATION	10278	4859	5499	5780	2608	640	227	594	92
% STANDARD ERROR	A	A	A	B	B	C	D	C	20219
ESTIMATED % OF USE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A
								0.0	0.0
TOTAL									
ESTIMATED POPULATION	87749	124679	131906	128829	79437	28375	4871	22663	18018
% STANDARD ERROR	A	A	A	A	A	A	A	A	4004
ESTIMATED % OF POP	34.4	48.8	51.7	50.4	31.1	11.1	1.9	8.9	1.6
									50822
									A
									19.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*	STANDARD ERROR	*	CODE	*
*	-----	-----	-----	*
*	GREATER THAN	LESS THAN	*	*
*	-----	OR	*	*
*	-----	EQUAL TO	*	*
*	-----	-----	*	*
*	0 %	10 %	*	A
*	10 %	20 %	*	*
*	20 %	30 %	*	B
*	30 %	*	*	*
*	*	*	*	C
*	*	*	*	*
*	*	*	*	D
*	*	*	*	*

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**GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982**

PAGE 1 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
OTHER 01	5407.8	662.6	12.3
OTHER 02	2593.7	421.5	16.3
OTHER 03	1669.5	377.6	22.6
OTHER 04	1737.6	354.8	20.4
OTHER 05	87.6	17.7	26.2
OTHER 06	1898.8	452.5	23.8
OTHER 07	390.6	78.1	20.0
OTHER 08	105.4	59.3	56.2
OTHER 09	1867.6	547.0	29.3
OTHER 10	1489.5	330.9	22.2
OTHER 11	694.1	286.7	41.3
OTHER 12	872.1	192.0	22.0
OTHER 13	1134.4	174.3	15.4
AIRPTSA	554.3	75.3	13.6
AIRTRCAT300	344.1	72.8	21.2
AMD FALC20	377.6	10.7	2.8
AMD FALC50	60.4	16.5	27.2
ARCTICS1A	207.1	8.7	4.2
ARONCA15	346.2	29.7	8.6
ARONCA65	187.0	0.0	0.0
ARONCAC3	84.0	5.7	6.8

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT
BELONGING TO MANUFACTURER/MODEL GROUPS OF FEWER THAN
20 AIRCRAFT IN SIZE FOR AIRCRAFT XX WHERE XX STANDS FOR

- 01 FIXED WING PISTON, 1 ENGINE, 1-3 SEATS.
- 02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
- 03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
- 04 FIXED WING PISTON, 2 ENGINE, 7+ SEATS.
- 05 FIXED WING PISTON, OTHER.
- 06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
- 07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
- 08 FIXED WING TURBOPROP, OTHER.
- 09 FIXED WING TURBOJET, 2 ENGINES.
- 10 FIXED WING TURBOJET, OTHER.
- 11 ROTORCRAFT, PISTON.
- 12 ROTORCRAFT, TURBINE.
- 13 OTHER AIRCRAFT.

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982

PAGE 2 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
AVIAN FALCON	3.7	0.4	10.1
AYRES S2	1870.4	201.7	10.8
AYRES S2T	129.4	16.2	12.5
BALMKSFIREFY	135.4	37.6	27.8
BEAGLEB206	66.0	3.8	5.8
BEECH 100	497.6	118.5	23.8
BEECH 17	374.3	12.9	3.4
BEECH 18	2693.5	203.4	7.6
BEECH 200	1147.0	193.7	16.9
BEECH 23	5084.1	278.5	5.5
BEECH 33	2463.7	312.8	12.7
BEECH 35	15697.8	648.6	5.4
BEECH 36	2370.7	324.8	13.7
BEECH 45	826.2	0.0	0.0
BEECH 50	778.2	20.6	2.7
BEECH 55	4091.4	480.9	11.8
BEECH 58	1804.6	338.3	18.7
BEECH 60	790.4	161.9	20.5
BEECH 65	429.0	52.7	12.3
BEECH 80	529.2	50.2	9.5
BEECH 90	1473.4	397.4	27.0
BEECH 95	1199.9	144.1	12.0

TABLE 2 - 19

**GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982**

PAGE 3 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
BELL 204	428.6	16.1	3.8
BELL 206	3170.9	312.0	9.8
BELL 47	3176.3	313.3	9.9
BLANCA11	1395.1	205.6	14.7
BLANCA1413	402.0	50.9	12.7
BLANCA1419	396.1	39.0	9.8
BLANCA17	1034.7	83.8	8.1
BLANCA7	9720.4	307.5	3.2
BLANCA8	486.1	43.9	9.0
BNORM BN2	326.0	57.5	17.6
BOEING75	4426.5	507.7	11.5
BOEINGB17	53.3	3.2	5.9
CAMRONMODELO	17.9	1.5	8.2
CESSNA120	2107.9	56.5	2.7
CESSNA140	4941.5	261.8	5.3
CESSNA150	39428.9	1413.2	3.6
CESSNA170	6016.7	293.0	4.9
CESSNA172	43186.1	1337.6	3.1
CESSNA175	2687.6	103.8	3.9
CESSNA177	3980.8	313.0	7.9
CESSNA180	5921.8	422.5	7.1
CESSNA182	21843.5	960.7	4.4

TABLE 2 - 19

**GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982**

PAGE 4 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
CESSNA185	1974.4	346.9	17.6
CESSNA188	3383.7	351.8	10.4
CESSNA195	1306.9	62.3	4.8
CESSNA205	617.0	75.3	12.2
CESSNA206	4169.0	490.9	11.8
CESSNA207	505.0	221.1	43.8
CESSNA210	8018.4	509.5	6.4
CESSNA305	932.2	53.4	5.7
CESSNA310	6599.8	482.2	7.3
CESSNA320	985.8	63.0	6.4
CESSNA337	1971.3	212.8	10.8
CESSNA340	1329.0	160.0	12.0
CESSNA401	717.7	103.0	14.4
CESSNA402	1113.2	296.4	26.6
CESSNA411	511.6	24.0	4.7
CESSNA414	638.7	128.8	20.2
CESSNA421	1626.9	241.8	14.9
CESSNA500	919.2	135.6	14.8
CHILD S1	64.2	11.9	18.6
COMMONTH185	154.2	8.8	5.7
CONAERLA4	554.8	174.8	31.5
CURTISTRAVIR	333.9	22.3	6.7

TABLE 2 - 19

**GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982**

PAGE 5 OF 10

MANUFACTURER/ MODEL GROUP		HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
CVAC 240		3.6	0.0	0.0
CVAC BT13		173.7	45.9	26.4
CVAC P4Y		27.9	0.3	0.9
DHAV DHC1		206.6	23.0	11.1
DHAV DHC2		771.5	80.3	10.4
DHAVXXDH82		157.8	21.9	13.9
DOUG A26		119.3	13.8	11.6
DOUG DC3		1340.2	0.0	0.0
DOUG DC6		28.3	8.8	31.0
EMAIR MA1		45.2	3.9	8.5
EMB 110		220.1	0.7	0.3
ENSTRMF28		318.6	60.4	19.0
FLEET 16B		47.5	4.0	8.5
FRCHLD24		462.4	23.0	5.0
FRCHLDFH1100		94.3	13.2	14.0
FRCHLDM62		393.3	18.8	4.8
GLASFLH301		103.3	6.0	5.9
GRTLKS2T1		44.9	5.8	12.9
GRUMANG21		16.0	29.3	183.1
GRUMANTBM		70.4	6.3	9.0
GRUMAVAA1		868.8	117.0	13.5
GRUMAVAA5		655.3	168.6	25.7

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982

PAGE 6 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
GRUMAVG164	1262.2	222.4	17.6
GULSTM112	737.7	101.1	13.7
GULSTM500	815.3	120.2	14.7
GULSTM680	539.8	93.8	17.4
GULSTM690TP	582.6	72.9	12.5
GULSTMAA1	739.1	84.3	11.4
GULSTMAA5	1616.8	197.8	12.2
GULSTMG1159	532.2	0.0	0.0
GULSTMG44	207.4	16.5	8.0
HELIO H391	33.6	2.2	6.4
HELIO H395	47.2	7.8	16.4
HILLERUH12	1380.2	95.5	6.9
HUGHES269	1105.6	98.0	8.9
HUGHES369	1334.2	278.5	20.9
HWKSLYDH104	108.9	0.0	0.0
HYNES B2	158.3	24.1	15.2
INTRCP200	56.7	2.5	4.3
ISRAELI124	199.7	54.9	27.5
JBMSTRDG15	121.8	5.5	4.5
LAIKFN10	16.9	1.3	7.5
LEAR 24	313.3	141.8	45.3
LEAR 35	509.9	114.6	22.5

TABLE 2 - 19

**GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982**

PAGE 7 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
LET L13	143.0	19.3	13.5
LKHEED1329	403.9	31.7	7.8
LKHEEDT33	120.0	0.0	0.0
LUSCOM8	4178.6	159.6	3.8
MAULE M4	274.4	15.9	5.8
MAULE M5	116.3	17.1	14.7
MCCULLHJ2	7.0	0.9	13.4
MCLISHFUNKB	207.1	5.1	2.5
MNCQUP90	91.2	14.6	16.0
MOONEYM20	9847.6	576.0	5.8
MTSBSIMU2	745.4	125.7	16.9
MULTECD16	106.5	6.4	6.0
NAMER F51	180.0	10.6	5.9
NAMER NA260	142.4	5.8	4.1
NAMER T6	1328.8	119.1	9.0
NAVIONNAVION	2888.7	70.3	2.4
NORD SV4	86.1	9.0	10.4
NORWST65	128.9	4.3	3.3
ORLHELH19	102.9	1.5	1.4
PICARDAX6	34.2	5.4	15.8
PIPER 600	606.4	141.9	23.4
PIPER J2	75.9	5.8	7.7

TABLE 2 - 19

**GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982**

PAGE 8 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
PIPER J3	9030.9	563.9	6.2
PIPER J4	399.9	12.8	3.2
PIPER J5	752.0	98.9	13.2
PIPER PA12	2451.8	244.2	10.0
PIPER PA16	781.6	95.6	12.2
PIPER PA17	181.3	13.2	7.3
PIPER PA18	5458.7	673.9	12.3
PIPER PA20	902.0	26.3	2.9
PIPER PA22	12311.1	493.0	4.0
PIPER PA23	8446.9	516.5	6.1
PIPER PA24	8544.4	353.8	4.1
PIPER PA25	3496.5	254.7	7.3
PIPER PA28	41584.8	1246.0	3.0
PIPER PA30	3529.7	208.6	5.9
PIPER PA31	3816.0	320.4	8.4
PIPER PA31T	624.5	205.2	32.9
PIPER PA32	7073.2	579.3	8.2
PIPER PA34	2564.3	342.1	13.3
PIPER PA36	362.2	65.9	18.2
PIPER PA38	2099.1	156.3	7.4
PIPER PA44	331.1	142.7	43.1
PROPTJT200	95.7	4.6	4.8

TABLE 2 - 19

**GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1982**

PAGE 9 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
RAVEN S50	20.9	1.3	6.1
RAVEN S55	95.0	25.2	26.5
RKWEILLNA265	748.1	242.6	32.4
ROBSTERNR22	88.0	16.9	19.2
RYAN ST3	325.2	35.0	10.8
RYAN STA	30.0	5.0	16.8
SCHLERKA8	58.1	3.6	6.2
SCHZERG164	2637.7	334.8	12.7
SCHZERSG1	695.0	157.0	22.6
SCHZERSG2	897.1	147.1	16.4
SEMCO CLNGER	5.4	0.4	8.3
SKRSKYSS55	237.7	11.1	4.7
SKRSKYSS58	196.6	10.3	5.2
SMITH 600	326.8	41.2	12.6
SNIAS 350	140.0	55.0	39.3
STNSON10	253.6	11.3	4.5
STNSON15	211.6	12.9	6.1
STNSONV77	130.2	20.9	16.1
STOLAMRC3	193.8	8.3	4.3
TCRAFTA	38.1	13.4	35.0
TCRAFTBC	2937.6	221.6	7.5
TCRAFTBL	487.7	23.8	5.1

TABLE 2 - 19
 GENERAL AVIATION LIFETIME AIRFRAME HOURS
 BY
 AIRCRAFT MANUFACTURER/MODEL GROUP
 1982

PAGE 10 OF 10

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
TRYTEK65	659.0	36.6	5.6
UNIVACGC1	860.4	95.0	11.0
UNIVAR108	3754.8	162.5	4.3
UNIVAR415	3667.8	250.5	6.8
VARGA 2150	53.0	7.6	14.3
VARGA G21	52.7	5.6	10.6
WACO ASO	62.3	2.9	4.6
WACO UPF7	621.3	0.0	0.0
WACO YK	97.3	3.9	4.0
WTHERLY201	116.3	9.7	8.4
TOTAL AIRCRAFT	434022.5	4300.7	1.0

TABLE 2 - 20

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1982

PAGE 1 OF 3

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
AMTRMCMCULL	68	64.60	17.15	6	53.59
AMTRVWVOLKS	333	27.12	57.24	25	40.41
CONT 6285	106	26.67	63.56	285	16.04
CONT A40	16	84.39	12.64	16	14.70
CONT A50	6	69.76	16.77	85	14.83
CONT A65	4876	6.84	49.21	55	11.67
CONT A75	1252	12.27	60.89	58	19.45
CONT A80	26	48.53	34.75	30	16.57
CONT C125	264	20.77	69.21	61	25.94
CONT C145	1863	8.49	84.51	85	20.79
CONT C85	3571	5.97	59.27	52	9.33
CONT C90	1594	7.78	62.58	68	20.89
CONT E185	1580	7.04	76.49	68	8.22
CONT E225	1318	4.87	88.83	71	7.55
CONT 0200	12710	2.60	85.31	132	8.90
CONT 0300	8442	2.97	84.57	75	9.30
CONT 0360	3575	3.62	89.92	130	9.39
CONT 0470	23809	1.60	88.91	139	7.06
CONT 0520	27066	1.20	93.49	218	4.44
CONT R670	519	24.84	50.20	74	41.28
DHAVXXGIPSY	69	9.24	69.94	41	12.60
FCD 6440	107	26.27	32.33	55	8.87
FRNLN4AC176	72	28.66	40.79	33	38.31
FRNLN4AC199	55	46.91	35.70	42	13.99
FRNLN6A4 150	506	15.58	49.83	44	18.69
FRNLN6A4 165	563	14.40	50.41	45	16.77
FRNLN8A8215	72	8.07	36.11	40	11.92
FRNLN6AV335	67	44.23	59.10	249	37.50
FRNLN6AV350	198	7.84	87.26	110	37.31
FRNLN6VS335	18	117.43	27.57	4	36.67
FRNLNDO3356	105	33.14	57.86	99	48.55
GE CF700	416	0.00	100.00	409	7.39
GE CJ610	802	10.71	89.09	508	21.42
GE CJ805	68	0.00	100.00	148	0.01
GLADENRS	88	23.08	48.25	32	23.22
JACOBPR755	336	13.76	79.30	183	49.92
JACDBSR755	71	55.83	19.12	42	26.84
JACDBSR915	26	28.85	35.19	38	15.99
LYC 0540	7216	3.29	87.00	162	9.08
LYC LTS101	70	20.19	82.03	285	8.33

TABLE 2 - 20

**GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1982**

PAGE 2 OF 3

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
LYC 0145	419	17.00	51.46	48	23.45
LYC 0235	10394	2.52	88.88	262	8.90
LYC 0290	2116	9.38	66.29	58	14.42
LYC 0320	35721	1.17	91.56	169	5.08
LYC 0340	92	10.68	65.49	60	9.59
LYC 0360	25074	1.23	93.85	159	5.26
LYC 0435	934	10.17	80.36	185	13.80
LYC 0480	1264	8.03	86.01	147	13.78
LYC 0540	13547	1.54	93.99	275	6.71
LYC 0541	1132	3.43	86.61	174	13.31
LYC 0720	208	20.64	87.08	168	13.33
LYC R680	248	40.04	39.10	68	41.39
LYC T53	55	7.63	93.02	224	13.12
MNASCO4	11	40.76	52.56	33	14.18
ONAN B48	2835	2.70	70.47	279	4.45
PCKARDV1650	56	8.63	55.57	62	8.24
PWA JT12	458	4.12	95.34	344	11.57
PWA JT15	837	0.00	100.00	226	13.93
PWA JT3D	183	28.81	49.11	396	3.80
PWA JT8	686	0.00	100.00	559	5.23
PWA PT6	3583	1.02	99.09	403	10.14
PWA PT6T	104	0.00	100.00	277	4.00
PWA R1340	1567	9.95	68.83	273	10.32
PWA R1830	345	16.57	62.71	223	18.64
PWA R2000	33	60.81	19.81	32	19.05
PWA R2800	405	16.44	52.89	94	16.57
PWA R985	2055	7.79	53.66	236	10.73
RROYCE DART	381	9.34	83.61	515	9.32
RROYCE GIPSY	5	46.39	9.13	16	29.50
RROYCESPEY	418	0.00	100.00	555	9.80
RROYCE VIPER	166	24.39	73.60	322	1.38
TMECA AST2T	32	0.00	100.00	372	0.00
TMECA AST3T	36	0.00	100.00	533	32.45
WARNER 165	72	41.18	54.22	29	3.34
WARNER 185	24	15.24	96.73	25	0.87
WARNER 50	21	124.03	11.79	36	18.07
WRIGHT J5	4	49.16	12.66	18	5.05
WRIGHT R1820	161	12.66	48.54	219	16.04

TABLE 2 - 20

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1982

PAGE 3 OF 3

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
WRIGHTR2600	83	12.86	55.85	102	11.62
WRIGHTR3350	111	12.59	53.78	448	16.54
WRIGHTR760	35	65.52	36.79	134	24.40
ALL ENGINES	240520	0.12	82.92	192	1.64

NOTE : ENGINE MANUFACTURER/MODEL GROUPS FOR WHICH
SEPARATE ESTIMATES ARE NOT AVAILABLE ARE NOT
LISTED IN THE TABLE, BUT ARE INCLUDED IN THE
"ALL ENGINES" ESTIMATES.

TABLE 2 - 21

**GENERAL AVIATION FUEL CONSUMPTION
BY AIRCRAFT TYPE
1982**

AIRCRAFT TYPE	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
FIXED WING			
PISTON	8.30	69.09	1.6
1 ENG 1-3 SEATS	10.94	174.28	1.1
1 ENG 4+ SEATS	10.03	243.37	2.0
TOTAL 1 ENG	26.14	79.45	1.3
2 ENG 1-6 SEATS	39.78	104.12	5.7
2 ENG 7+ SEATS	32.45	183.58	5.8
TOTAL 2 ENG	394.18	13.16	1.1
OTHER PISTON	14.70	440.11	6.2
TURBOPROP	76.88	121.16	2.0
2 ENG 1-12 SEATS	214.86	111.81	11.1
2 ENG 13+ SEATS	111.13	232.97	11.3
TOTAL 2 ENG	43.35	3.09	2.1
OTHER TURBOPROP	108.91	236.06	11.5
TURBOJET	297.77	401.06	29.0
2 ENG	705.05	186.12	37.0
OTHER	364.52	587.18	47.0
TOTAL TURBOJET	37.46	1263.35	48.7
TOTAL FIXED WING			
ROTORCRAFT	14.09	8.16	0.2
PISTON	36.25	64.21	6.2
TURBINE	30.79	72.37	6.2
TOTAL ROTORCRAFT			
OTHER	0.00	0.00	0.0
TOTAL AIRCRAFT	36.64	1335.72	49.1
TOTAL JET FUEL	159.91	887.45	48.7
TOTAL AVIATION GASOLINE	14.50	448.27	6.3

TABLE 2-22
NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS

					1982			PAGE 1 OF 2
						6	7	8 TOTALS
L	ESTIMATE	150	232	4549	10893	0	95	1268
	% STD ERR	*	45.9	10.6	7.1	0.0	*	21.1
	ROW %	0.8	1.3	25.4	60.8	0.0	0.5	27.9
	COLUMN %	0.4	1.7	10.9	13.7	0.0	7.6	5.4
L, MB	ESTIMATE	98	0	652	8007	0	0	1321
	% STD ERR	*	0.0	23.3	8.0	0.0	0.0	21.0
	ROW %	0.8	0.0	5.7	69.4	0.0	0.0	18.9
	COLUMN %	0.2	0.0	1.8	10.1	0.0	0.0	12.7
L, MB, GS	ESTIMATE	378	202	1990	33781	84	525	11250
	% STD ERR	38.9	*	17.0	3.7	*	33.5	6.9
	ROW %	0.4	0.2	2.2	36.9	0.1	0.6	2.9
	COLUMN %	0.9	1.5	4.8	42.6	34.1	42.3	12.3
L, MB, GS, R	ESTIMATE	25	0	72	575	3	107	240
	% STD ERR	*	0.0	*	28.6	*	*	46.3
	ROW %	0.1	0.0	0.4	3.3	0.0	0.6	3.9
	COLUMN %	0.1	0.0	0.2	0.7	1.2	8.6	1.4
LRN	ESTIMATE	2	97	85	432	0	56	117
	% STD ERR	*	*	*	36.0	0.0	*	48.3
	ROW %	0.0	2.0	1.7	8.9	0.0	1.1	8.3
	COLUMN %	0.0	0.7	0.2	0.5	0.0	4.5	7.8
R	ESTIMATE	32	3	88	682	3	112	330
	% STD ERR	*	21.1	*	26.5	*	*	40.3
	ROW %	0.2	0.0	0.5	3.8	0.0	0.6	3.8
	COLUMN %	0.1	0.0	0.2	0.9	1.2	9.0	3.7
M	ESTIMATE	71	0	27	275	0	0	74
	% STD ERR	*	0.0	*	47.3	0.0	0.0	93.8
	ROW %	6.1	0.0	2.3	23.6	0.0	0.0	26.8
	COLUMN %	0.2	0.0	0.1	0.3	0.0	0.0	7.1
L, MB, GS, M	ESTIMATE	0	0	1	254	0	0	71
	% STD ERR	0.0	0.0	*	24.3	0.0	0.0	25.1
	ROW %	0.0	0.0	0.1	0.1	0.0	0.0	22.3
	COLUMN %	0.0	0.0	0.0	0.3	0.0	0.0	0.4

TABLE 2-22
NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS
(CONTINUED)

		1982						PAGE 2 OF 2		
		1	2	3	4	5	6	7	8	TOTALS
LRN. M	ESTIMATE	0	0	0	0	15	0	0	0	321
	% STD ERR	0.0	0.0	0.0	0.0	*	0.0	0.0	0.0	39.6
	ROW %	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	95.6
	COLUMN %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1
NO. GROUP	ESTIMATE	39880	12782	34312	25995	159	490	2550	525	116473
	% STD ERR	2.8	5.7	3.4	4.4	*	33.3	14.9	30.9	1.2
	ROW %	34.1	11.0	29.5	22.3	0.1	0.4	2.2	0.5	45.6
	COLUMN %	98.2	96.0	82.3	32.8	84.6	38.5	15.3	0.8	
ALL CRAFT	ESTIMATE	40391	13313	41682	79320	246	1242	16849	62521	255387
	% STD ERR	2.8	5.6	3.1	2.1	48.8	20.8	5.6	2.0	
	ROW %	15.8	5.2	16.3	31.1	0.1	0.5	6.5	24.5	

KEY

- | | | | | | |
|---------------------------|-----------------------------|-----------------------------|---------------------------|-------|-------|
| GROUP | GROUP | GROUP | GROUP | GROUP | GROUP |
| 1. NO REGULATORY AVIONICS | 4. TWO-WAY COMMUNICATIONS | 7. TWO-WAY COMMUNICATIONS | | | |
| 2. TWO-WAY COMMUNICATIONS | TWO SYSTEMS - AIR TAXIS | TWO SYSTEMS - AIR TAXIS | | | |
| 3. TWO-WAY COMMUNICATIONS | 4096 CODE TRANSPONDER | 4096 CODE TRANSPONDER | | | |
| TWO SYSTEMS - AIR TAXIS | VOR OR RNAV | VOR OR RNAV | | | |
| VOR OR ADF OR RNAV | ALTITUDE ENCODING EQUIPMENT | ALTITUDE ENCODING EQUIPMENT | | | |
| | | | 8. TWO-WAY COMMUNICATIONS | | |
| | | | TWO SYSTEMS - AIR TAXIS | | |
| | | | 4096 CODE TRANSPONDER | | |
| | | | VOR OR RNAV | | |
| | | | DME | | |
| | | | | | |

GROUP

- | | | | |
|-----|---------------|------|--------------------------|
| L: | LOCALIZER | R: | RADAR ALTIMETER |
| MB: | MARKER BEACON | LRN: | LONG RANGE RNAV |
| GS: | GLIDE SLOPE | M: | MICROWAVE LANDING SYSTEM |

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-23
HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP

					1982			PAGE 1 OF 2
						6	7	8 TOTALS
EXECUTIVE	ESTIMATE	10	137	242	1975	2	54	576 16404
	% STD ERR	*	31.4	39.8	15.8	*	*	28.8 4.6
	ROW %	0.1	0.8	1.5	12.0	0.0	0.3	81.7 4.3
	COLUMN %	0.0	1.0	0.6	2.5	0.8	4.3	21.4 6.4
BUSINESS	ESTIMATE	711	689	3123	17739	105	33	3922 49638
	% STD ERR	23.8	29.1	12.6	5.4	*	*	12.2 4.4
	ROW %	1.4	1.4	6.3	35.7	0.2	0.1	47.0 2.8
	COLUMN %	1.8	5.2	7.5	22.4	42.7	2.7	37.3 19.4
PERSONAL	ESTIMATE	11585	5535	23708	39471	85	178	6548 12708
	% STD ERR	5.9	9.2	4.3	3.3	*	*	9.3 6.3
	ROW %	11.6	5.5	23.8	39.6	0.1	0.2	6.6 1.6
	COLUMN %	28.7	41.6	56.9	49.8	26.4	14.3	39.3 20.3
INSTRUCT.	ESTIMATE	911	704	3595	7834	0	4	1155 99798
	% STD ERR	23.0	25.3	12.6	8.7	0.0	*	23.7 5.8
	ROW %	5.8	4.5	23.0	50.1	0.0	0.0	7.4 2.7
	COLUMN %	2.3	5.3	8.6	9.9	0.0	0.3	6.9 2.3
AERIAL AP	ESTIMATE	5720	658	409	465	0	0	65 139
	% STD ERR	9.4	20.8	31.7	33.7	0.0	0.0	*
	ROW %	76.7	8.8	5.5	6.2	0.0	0.0	1.9 7.8
	COLUMN %	14.2	4.9	1.0	0.6	0.0	0.0	0.4 6.1
AERIAL OB	ESTIMATE	514	337	949	1215	0	88	545 7458
	% STD ERR	30.3	27.7	24.7	20.6	0.0	*	34.3 5.8
	ROW %	11.4	7.5	21.1	27.0	0.0	2.0	12.1 18.8
	COLUMN %	1.3	2.5	2.3	1.5	0.0	7.1	3.3 1.4
OTHR WORK	ESTIMATE	513	506	256	325	0	8	90 169
	% STD ERR	34.2	31.2	33.6	33.9	0.0	*	45.4 15.7
	ROW %	27.5	27.1	13.7	17.4	0.0	0.4	4.8 9.0
	COLUMN %	1.3	3.8	0.6	0.4	0.0	0.6	0.5 0.3
COMMUTER	ESTIMATE	0	16	47	230	0	0	36 790
	% STD ERR	0.0	30.9	*	46.2	0.0	0.0	*
	ROW %	0.0	1.4	4.2	20.6	0.0	0.0	3.2 23.0
	COLUMN %	0.0	0.1	0.1	0.3	0.0	0.0	0.2 70.6

TABLE 2-23
HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP
(CONTINUED)

				1982			PAGE 2 OF 2					
				1	2	3	4	5	6	7	8	TOTALS
AIR TAXI	ESTIMATE	178	1705	345	698	0	897	853	4044	8521		
	% STD ERR	*	16.9	39.3	25.2	0.0	27.0	24.6	10.9	7.3		
	ROW %	2.1	20.0	4.0	8.2	0.0	8.2	10.0	47.5			
OTHER	COLUMN %	0.4	12.6	0.6	0.9	0.0	56.1	5.1	6.5	3.3		
	ESTIMATE	871	839	274	800	2	82	213	1687	4768		
	% STD ERR	25.8	22.8	42.1	23.6	*	*	49.8	16.4	9.9		
RENTAL	ROW %	18.3	17.6	5.7	16.8	0.0	1.7	4.5	35.4			
	COLUMN %	2.2	6.3	0.7	1.0	0.6	6.6	1.3	2.7	1.9		
	ESTIMATE	417	219	872	4081	71	3	2269	2404	10116		
INACTIVE	% STD ERR	34.3	47.6	27.2	12.5	*	*	16.8	16.0	7.6		
	ROW %	4.1	2.2	6.6	40.1	0.7	0.0	22.4	23.8			
	COLUMN %	1.0	1.6	1.6	5.1	28.9	0.2	13.6	3.8	4.0		
TOTALS	ESTIMATE	18859	1939	8238	4451	3	107	496	1748	35840		
	% STD ERR	4.6	14.6	7.6	10.6	*	*	27.7	16.3	3.3		
	ROW %	52.6	5.4	23.0	12.4	0.0	0.3	1.4	4.9			
	COLUMN %	46.7	14.6	19.8	5.6	1.2	8.6	3.0	2.8	14.0		
	ESTIMATE	40391	13313	41682	79320	246	1242	16649	62521	255387		
	% STD ERR	2.8	5.6	3.1	2.1	48.8	20.8	5.6	2.0			
	ROW %	15.8	5.2	16.3	31.1	0.1	0.5	6.5	24.5			

KEY

GROUP	GROUP	GROUP	GROUP	GROUP	GROUP	GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS					
2. TWO-WAY COMMUNICATIONS	5. TWO SYSTEMS - AIR TAXIS	8. TWO SYSTEMS - AIR TAXIS					
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER					
TWO SYSTEMS - AIR TAXIS	VOR OR RNAV	ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT				
VOR OR ADF OR RNAV	5. 4096 CODE TRANSPONDER	5. 4096 CODE TRANSPONDER	6. TWO-WAY COMMUNICATIONS				
	ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT	4096 CODE TRANSPONDER				
			VOR OR RNAV				
			DME				

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-24
HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP

			1982				PAGE 1 OF 2				
			1	2	3	4	5	6	7	8	TOTALS
1-49	ESTIMATE	6	11	5	5	5	60	54	16	9	2
	% STD ERR	18.0	7.6	27.7	31.6	0.3	0.4	3.9	10.4		
	ROW %	23.8	30.5	35.5	21.3	64.6	17.3	12.6	8.9	20.9	
	COLUMN %	3608.0	2478.0	8780.0	22513.0	11.0	127.0	4181.0	10364.0	52080.0	
50-99	ESTIMATE	11	13	7	4	116	73	11	7	7	2
	% STD ERR	6.9	4.8	16.9	43.2	0.0	0.2	8.0	19.9		
	ROW %	8.9	18.6	21.1	28.4	4.5	10.2	25.1	16.6	20.4	
	COLUMN %	1920.0	1316.0	4387.0	12618.0	71.0	152.0	2777.0	10367.0	33609.0	
100-149	ESTIMATE	16	18	11	6	100	66	14	7	7	3
	% STD ERR	5.7	3.9	13.1	37.5	0.2	0.5	8.3	30.8		
	ROW %	4.8	9.9	10.5	15.9	28.9	12.2	16.7	16.6	13.2	
	COLUMN %	691.0	773.0	1259.0	4903.0	2.0	18.0	1286.0	7694.0	16826.0	
150-199	ESTIMATE	27	26	20	10	392	73	20	8	8	5
	% STD ERR	4.2	4.6	7.6	29.5	0.0	0.1	7.7	46.3		
	ROW %	1.7	5.8	3.0	6.2	0.8	1.4	7.7	12.3	6.5	
	COLUMN %	1343.0	613.0	894.0	4438.0	0.0	38.0	1086.0	6272.0	14684.0	
200-249	ESTIMATE	21	27	25	11	0	106	23	9	9	6
	% STD ERR	9.1	4.2	6.1	30.2	0.0	0.3	7.4	42.7		
	ROW %	3.3	4.6	2.1	5.6	0.0	3.1	6.5	10.0	5.8	
	COLUMN %	1089.0	133.0	500.0	2271.0	2.0	88.0	802.0	3693.0	8557.0	
250-299	ESTIMATE	23	42	33	16	392	74	26	12	8	
	% STD ERR	12.5	1.6	5.8	26.5	0.0	1.0	9.4	43.2		
	ROW %	2.6	1.0	1.2	2.9	0.8	7.1	4.8	5.9	3.4	
	COLUMN %	681.0	277.0	634.0	2515.0	0.0	49.0	686.0	4516.0	9359.0	
300-349	ESTIMATE	29	41	30	15	0	103	31	10	7	
	% STD ERR	7.3	3.0	6.8	26.9	0.0	0.5	7.3	48.3		
	ROW %	1.7	2.1	1.5	3.2	0.0	3.9	4.1	7.2	3.7	
	COLUMN %	308.0	345.0	355.0	1324.0	0.0	35.0	582.0	2567.0	5525.0	
350-399	ESTIMATE	43	38	43	21	0	132	33	13	10	
	% STD ERR	5.6	6.2	6.4	24.0	0.0	0.6	10.7	46.5		
	ROW %	0.8	2.6	0.9	1.7	0.0	2.8	3.6	4.1	2.2	
	COLUMN %	608.0	189.0	305.0	1709.0	0.0	38.0	711.0	2616.0	8176.0	

TABLE 2-24
HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP
(CONTINUED)

		1982				PAGE 2 OF 2				
		1	2	3	4	5	6	7	8	TOTALS
400-449	ESTIMATE	31	46	44	19	0	124	30	14	9
	% STD ERR	9.8	3.1	4.9	27.7	0.0	0.6	11.5	42.4	
	ROW %	1.5	1.4	0.7	2.2	0.0	3.1	4.3	4.2	2.4
	COLUMN %	1526.0	1135.0	1624.0	5580.0	0.0	385.0	2045.0	7267.0	19541.0
450 UP	ESTIMATE	19	18	19	10	0	33	17	7	5
	% STD ERR	7.8	5.8	8.3	28.5	0.0	2.0	10.5	37.2	
	ROW %	3.8	8.5	3.9	7.0	0.0	31.0	12.3	11.6	7.7
	COLUMN %	18859.0	1939.0	8236.0	4451.0	3.0	107.0	496.0	1748.0	35840.0
INACTIVE	ESTIMATE	4	14	7	10	109	76	27	16	3
	% STD ERR	*	5.4	23.0	12.4	0.0	0.3	1.4	4.9	
	ROW %	46.7	14.6	19.8	5.6	1.2	8.6	3.0	2.8	14.0
	COLUMN %	40391.0	13313.0	41682.0	79320.0	246.0	1242.0	16849.0	82521.0	255387.0
TOTALS	ESTIMATE	2	5	3	2	48	20	5	2	0
	% STD ERR	15.8	5.2	16.3	31.1	0.1	0.5	6.5	24.5	
	ROW %	3645.0	2054.0	2923.0	11903.0	154.0	495.0	5607.0	20748.0	47530.0

KEY

GROUP	GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS
	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS
	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER
	VOR OR RNAV	ALTITUDE ENCODING EQUIPMENT
2. TWO-WAY COMMUNICATIONS		
3. TWO-WAY COMMUNICATIONS	5. 4096 CODE TRANSPONDER	8. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS	ALTITUDE ENCODING EQUIPMENT	TWO SYSTEMS - AIR TAXIS
VOR OR ADF OR RNAV		ALTITUDE ENCODING EQUIPMENT
	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER
	VOR OR RNAV	VOR OR RNAV
	DME	DME
6. TWO-WAY COMMUNICATIONS		
4096 CODE TRANSPONDER		
ALTITUDE ENCODING EQUIPMENT		

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-25
HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP

1982										PAGE 1 OF 2		
		1	2	3	4	5	6	7	8	TOTALS		
0- 4 YRS	ESTIMATE	12	15	15	7	62	34	10	4	3		
	% STD ERR	7.7	4.3	6.1	25.0	0.3	1.0	11.8	43.7			
	ROW %	9.0	15.4	7.0	15.0	62.6	39.9	33.7	33.2	18.6		
	COLUMN %	6742.0	3083.0	5074.0	19984.0	0.0	339.0	3981.0	16972.0	58175.0		
5- 9 YRS	ESTIMATE	9	13	10	5	0	42	12	5	2		
	% STD ERR	12.0	5.5	9.0	35.6	0.0	0.6	7.1	30.2			
	ROW %	16.7	23.2	12.2	25.2	0.0	27.3	23.9	27.1	22.0		
	COLUMN %	4325.0	1758.0	5440.0	13485.0	2.0	140.0	2254.0	8283.0	35687.0		
10-14 YRS	ESTIMATE	12	17	10	6	77	68	16	7	3		
	% STD ERR	12.1	4.9	15.2	37.8	0.0	0.4	6.3	23.2			
	ROW %	10.7	13.2	13.1	17.0	0.8	11.3	13.5	13.2	14.0		
	COLUMN %	3348.0	2046.0	8410.0	16571.0	106.0	27.0	2089.0	9456.0	42050.0		
15-19 YRS	ESTIMATE	13	15	8	5	80	33	16	7	3		
	% STD ERR	8.0	4.9	20.0	39.4	0.3	0.1	5.0	22.5			
	ROW %	8.3	15.4	20.2	20.9	43.1	2.2	12.5	15.1	16.5		
	COLUMN %	2360.0	923.0	4410.0	9486.0	0.0	156.0	1313.0	3441.0	22087.0		
20-24 YRS	ESTIMATE	15	22	10	6	0	66	19	11	4		
	% STD ERR	10.7	4.2	20.0	42.8	0.0	0.7	5.9	15.6			
	ROW %	5.8	6.9	10.6	12.0	0.0	12.6	7.9	5.5	8.6		
	COLUMN %	1787.0	701.0	3670.0	5283.0	0.0	21.0	870.0	811.0	13145.0		
25-29 YRS	ESTIMATE	18	29	13	10	0	80	24	21	6		
	% STD ERR	13.6	5.3	27.9	40.2	0.0	0.2	6.6	6.2			
	ROW %	4.4	5.3	8.8	6.7	0.0	1.7	5.2	1.3	5.1		
	COLUMN %	1821.0	598.0	4007.0	2285.0	0.0	3.0	247.0	611.0	9571.0		
30-34 YRS	ESTIMATE	15	27	10	13	0	100	23	24	6		
	% STD ERR	19.0	6.2	41.9	23.9	0.0	0.0	2.6	6.4			
	ROW %	4.5	4.5	9.6	2.9	0.0	0.2	1.5	1.0	3.7		
	COLUMN %	14719.0	2356.0	8182.0	2803.0	1.0	187.0	497.0	569.0	29114.0		
35+ YRS	ESTIMATE	4	14	6	11	295	59	30	20	3		
	% STD ERR	*	8.1	28.1	8.9	0.0	0.6	1.7	2.0			
	ROW %	36.4	17.7	19.6	3.3	0.4	15.1	3.0	0.9	11.4		
	COLUMN %	40391.0	13313.0	41682.0	79320.0	246.0	1242.0	16649.0	62521.0	255367.0		

TABLE 2-25
HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP
(CONTINUED)

TOTALS	1982					PAGE 2 OF 2			
	1	2	3	4	5	6	7	8	TOTALS
ESTIMATE	2	5	3	4	5	48	20	2	0
% STD ERR	15.8	5.2	16.3	31.1	0.1	0.5	6.5	24.5	0
ROW %	13916.0	3928.0	1571.0	446.0	55.0	1.0	14.0	127.0	20058.0

KEY

GROUP	GROUP	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS
1. NO REGULATORY AVIONICS		4. TWO-SYSTEMS - AIR TAXIS 4096 CODE TRANSPONDER VOR OR RNAV	7. TWO SYSTEMS - AIR TAXIS 4096 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT
2. TWO-WAY COMMUNICATIONS			
3. TWO-WAY COMMUNICATIONS TWO SYSTEMS - AIR TAXIS VOR OR ADF OR RNAV	5. 4096 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT	8. TWO-WAY COMMUNICATIONS TWO SYSTEMS - AIR TAXIS ALTITUDE ENCODING EQUIPMENT 4096 CODE TRANSPONDER VOR OR RNAV DME	
	6. TWO-WAY COMMUNICATIONS 4096 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT		

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-26
HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP

		1982					PAGE 1 OF 2			
		1	2	3	4	5	6	7	8	TOTALS
FIXED WING	ESTIMATE	28368	5827	25968	19295	1	97	2176	556	82090
PISTON	% STD ERR	3.4	9.6	3.7	4.9	*	*	16.6	32.4	0.0
ENG=1	ROW %	34.6	6.9	31.6	23.5	0.0	0.1	2.7	0.7	
1-3 SEATS	COLUMN %	70.2	42.3	62.3	24.3	0.4	7.8	13.1	0.9	32.1
FIXED WING	ESTIMATE	3805	2135	14216	53741	187	630	12897	30397	118008
PISTON	% STD ERR	11.3	16.6	5.7	2.4	*	31.5	6.4	3.7	0.0
ENG=1	ROW %	3.2	1.8	12.0	45.5	0.2	0.5	10.9	25.8	
4+ SEATS	COLUMN %	9.4	16.0	34.1	67.8	76.0	50.7	77.5	48.6	46.2
FIXED WING	ESTIMATE	499	14	282	3115	2	72	669	13816	18459
PISTON	% STD ERR	33.1	37.6	42.8	11.8	*	*	26.6	3.1	0.0
ENG=2	ROW %	2.7	0.1	1.5	16.9	0.0	0.4	3.6	74.8	
1-6 SEATS	COLUMN %	1.2	0.1	0.7	3.9	0.8	5.8	4.0	22.1	7.2
FIXED WING	ESTIMATE	316	75	439	964	0	176	433	7658	10081
PISTON	% STD ERR	23.2	41.8	23.5	18.1	0.0	49.3	25.4	3.1	0.0
ENG=2	ROW %	3.1	0.7	4.4	9.6	0.0	1.7	4.3	76.1	
7+ SEATS	COLUMN %	0.8	0.6	1.1	1.2	0.0	14.2	2.6	12.2	3.9
FIXED WING	ESTIMATE	51	12	9	126	0	0	6	137	341
PISTON	% STD ERR	28.3	*	*	24.3	0.0	0.0	*	22.7	0.0
OTHER	ROW %	15.0	3.5	2.6	37.0	0.0	0.0	1.8	40.2	
0.1	COLUMN %	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.2	0.1
FIXED WING	ESTIMATE	2	2	0	6	0	56	0	4424	4490
TURBOPROP	% STD ERR	*	0.0	0.0	46.8	0.0	*	0.0	1.0	0.0
ENG=2	ROW %	0.0	0.0	0.0	0.1	0.0	1.2	0.0	98.5	
1-12 SEAT	COLUMN %	0.0	0.0	0.0	0.0	0.0	4.5	0.0	7.1	1.8
FIXED WING	ESTIMATE	0	0	0	82	0	0	22	538	642
TURBOPROP	% STD ERR	0.0	0.0	0.0	12.8	0.0	0.0	*	9.2	0.0
ENG=2	ROW %	0.0	0.0	0.0	0.1	0.0	0.0	3.4	83.8	
13+ SEATS	COLUMN %	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.3
FIXED WING	ESTIMATE	120	9	7	7	0	0	1	60	205
TURBOPROP	% STD ERR	28.0	17.8	*	*	0.0	0.0	*	*	0.0
OTHER	ROW %	58.5	4.4	3.4	3.4	0.0	0.0	0.5	29.3	
0.3	COLUMN %	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1

TABLE 2-26

HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
(CONTINUED)

	1	2	3	4	5	6	7	8	TOTALS
FIXED WING									PAGE 2 OF 2
TURBOJET	ESTIMATE	0.0	0.0	0.0	47	0	35	74	3318
ENG=2	% STD ERR	0.0	0.0	0.0	*	0.0	*	*	2.5
ROW %	0.0	0.0	0.0	1.4	0.0	1.0	2.1	95.5	0.0
COLUMN %	0.0	0.0	0.0	0.1	0.0	2.8	0.4	5.3	1.4
FIXED WING	ESTIMATE	29	0	0	20	0	0	52	789
TURBOJET	% STD ERR	36.7	0.0	0.0	*	0.0	0.0	*	6.6
OTHER	ROW %	3.3	0.0	0.0	2.2	0.0	0.0	5.8	88.8
COLUMN %	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.3	0.3
ROTORCRAFT	ESTIMATE	2858	1758	33.8	189	0	75	55	7
PISTON	% STD ERR	6.9	10.1	27.6	41.5	0.0	*	*	*
ROW %	54.1	33.3	6.4	3.6	0.0	1.4	1.0	0.1	0.0
COLUMN %	7.1	13.2	0.8	0.2	0.0	6.0	0.3	0.0	2.1
ROTORCRAFT	ESTIMATE	236	1012	35.1	1672	0	99	243	818
TURBINE	% STD ERR	39.4	17.3	31.8	12.2	0.0	*	36.9	20.1
ROW %	5.3	22.8	7.9	37.7	0.0	2.2	5.5	18.5	0.0
COLUMN %	0.6	7.6	0.8	2.1	0.0	8.0	1.5	1.3	1.7
OTHER	ESTIMATE	4108	2669	72	55	58	1	22	2
	% STD ERR	6.2	9.5	*	*	*	*	48.8	*
	ROW %	58.8	38.2	1.0	0.8	0.8	0.0	0.3	0.0
	COLUMN %	10.2	20.0	0.2	0.1	22.8	0.1	0.1	0.0
ALL CRAFT	ESTIMATE	40391	13313	41682	79320	248	1242	16649	62521
	% STD ERR	2.8	5.6	3.1	2.1	48.8	20.8	5.6	2.0
	ROW %	15.8	5.2	16.3	31.1	0.1	0.5	6.5	24.5
	COLUMN %	35439.0	10479.0	40821.0	74788.0	189.0	901.0	15342.0	31563.0
									209523.0

KEY

GROUP	GROUP	GROUP	GROUP	GROUP	GROUP	GROUP	GROUP	GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS							
	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS							
2. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER							
	VOR OR RNAV	VOR OR RNAV							
3. TWO-WAY COMMUNICATIONS	5. 4096 CODE TRANSPONDER	8. TWO-WAY COMMUNICATIONS							
TWO SYSTEMS - AIR TAXIS	ALITUDE ENCODING EQUIPMENT	TWO SYSTEMS - AIR TAXIS							
VOR OR ADF OR RNAV	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER							
COLUMN %	6. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS							
	4096 CODE TRANSPONDER	TWO SYSTEMS - AIR TAXIS							
	ALITUDE ENCODING EQUIPMENT	4096 CODE TRANSPONDER							

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-27
HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP

					1982				PAGE 1 OF 2			
					1	2	3	4	6	7	8	TOTALS
ALASKAN	ESTIMATE	1018	1488	3929	1147	0		71	218	197	8087	
	% STD ERR	23.3	20.2	12.3	21.5	0.0		*	*	49.8	8.3	
	ROW %	12.6	18.4	46.7	14.2	0.0		0.9	2.7	2.4		
	COLUMN %	2.5	11.2	9.4	1.4	0.0		5.7	1.3	0.3	3.2	
CENTRAL	ESTIMATE	3504	321	2385	5297	59		0	885	3384	15838	
	% STD ERR	12.6	38.8	15.3	10.7	*		0.0	26.9	13.0	5.9	
	ROW %	22.1	2.0	15.1	33.4	0.4		0.0	5.6	21.4		
	COLUMN %	8.7	2.4	5.7	6.7	24.0		0.0	5.3	5.4	6.2	
EASTERN	ESTIMATE	4446	968	4681	7941	11		238	1916	7822	28000	
	% STD ERR	10.5	20.0	10.9	8.6	*		46.3	18.5	8.5	4.3	
	ROW %	15.9	3.5	18.6	28.4	0.0		0.8	6.8	27.9		
	COLUMN %	11.0	7.3	11.2	10.0	4.5		19.0	11.5	12.5	11.0	
EUROPEAN	ESTIMATE	15	12	211	29	0		0	19	133	419	
	% STD ERR	*	*	*	*	0.0		0.0	*	*	35.1	
	ROW %	3.6	2.9	50.4	6.9	0.0		0.0	4.5	31.7		
	COLUMN %	0.0	0.1	0.5	0.0	0.0		0.0	0.1	0.2	0.2	
GRT LAKES	ESTIMATE	8974	1655	9028	14223	5		196	1841	10497	46419	
	% STD ERR	7.4	16.6	7.7	6.4	*		*	17.8	7.1	3.2	
	ROW %	19.3	3.6	19.4	30.6	0.0		0.4	4.0	22.6		
	COLUMN %	22.2	12.4	21.7	17.9	2.0		15.8	11.1	16.8	18.2	
NEW ENG.	ESTIMATE	1652	578	1575	2271	6		4	677	2561	9325	
	% STD ERR	18.1	29.7	18.7	18.4	*		*	30.6	15.5	7.8	
	ROW %	17.7	6.2	16.9	24.4	0.1		0.0	7.3	27.5		
	COLUMN %	4.1	4.3	3.8	2.9	2.4		0.3	4.1	4.1	3.7	
NTHWEST MT	ESTIMATE	4152	2103	3762	9241	0		17	1620	5786	26681	
	% STD ERR	11.1	16.1	11.8	7.9	0.0		*	19.6	10.1	4.4	
	ROW %	15.8	7.9	14.1	34.6	0.0		0.1	6.1	21.7		
	COLUMN %	10.3	15.8	9.0	11.7	0.0		1.4	9.7	9.3	10.4	
SOUTHERN	ESTIMATE	4924	1694	5369	12041	2		271	3046	10776	38124	
	% STD ERR	10.2	17.6	10.1	7.0	*		48.6	14.8	6.8	3.6	
	ROW %	12.9	4.4	14.1	31.6	0.0		0.7	8.0	28.3		
	COLUMN %	12.2	12.7	12.9	15.2	0.8		21.8	18.3	17.2	14.9	

TABLE 2-27
HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
(CONTINUED)

	1982								PAGE 2 OF 2	
	1	2	3	4	5	6	7	8	TOTALS	
SOUTHWEST	ESTIMATE	6918	1606	4935	12084	174	313	2300	11200	39509
	% STD ERR	8.8	17.0	10.5	8.9	*	47.3	16.6	6.7	3.5
	ROW %	17.5	4.1	12.5	30.5	0.4	0.8	5.8	28.3	
WEST-PACIF	COLUMN %	17.1	12.1	11.8	15.2	70.7	25.2	13.8	17.9	15.5
	ESTIMATE	5187	2824	5842	14132	0	161	4226	10612	42985
	% STD ERR	9.7	12.8	9.1	6.3	0.0	*	11.5	7.1	3.3
TOTALS	ROW %	12.1	6.6	13.6	32.9	0.0	0.4	9.8	24.7	
	COLUMN %	12.8	21.2	14.0	17.8	0.0	13.0	25.4	17.0	16.8
	ESTIMATE	40381	13313	41682	78320	248	1242	16649	62521	255367
	% STD ERR	2.8	5.6	3.1	2.1	48.8	20.8	5.6	2.0	
	ROW %	15.8	5.2	16.3	31.1	0.1	0.5	6.5	24.5	

KEY

- | GROUP | GROUP | GROUP |
|----------------------------|-----------------------------|-----------------------------|
| 1. NO REGULATORY AVIONICS | 4. TWO-WAY COMMUNICATIONS | 7. TWO-WAY COMMUNICATIONS |
| 2. TWO-WAY COMMUNICATIONS | 5. TWO SYSTEMS - AIR TAXIS | 8. TWO SYSTEMS - AIR TAXIS |
| 3. TWO-WAY COMMUNICATIONS | 4096 CODE TRANSPONDER | 4096 CODE TRANSPONDER |
| VOR OR ADF QR RNAV | VOR OR RNAV | ALTITUDE ENCODING EQUIPMENT |
| | | |
| 5. TWO SYSTEMS - AIR TAXIS | 5. 4096 CODE TRANSPONDER | 6. TWO-WAY COMMUNICATIONS |
| VOR OR ADF QR RNAV | ALTITUDE ENCODING EQUIPMENT | 4096 CODE TRANSPONDER |
| | | ALTITUDE ENCODING EQUIPMENT |
| | | VOR OR RNAV |
| | | DME |

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-28

NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP

1982										PAGE 1 OF 2		
	L	L, MB	L, MB, GS	L, MB, GS, R	LRN	R	M	L, MB, GS, M	LRN, M	NO GROUP	ALL CRAFT	
EXECUTIVE	ESTIMATE	29	28	8	5	9	5	35	54	18	4	
	% STD ERR	3.1	3.9	37.7	48.1	18.5	49.7	2.2	2.2	6.3	6.3	
	ROW %	2.8	5.6	8.7	45.7	62.4	45.3	30.8	34.4	0.9	8.4	
	COLUMN %	1883.0	2292.0	31281.0	4683.0	851.0	4986.0	308.0	293.0	9422.0	49838.0	
BUSINESS	ESTIMATE	17	15	3	10	27	8	41	43	162	7	
	% STD ERR	3.8	4.6	*	9.5	1.3	10.0	0.6	0.6	0.0	19.0	
	ROW %	10.5	19.9	34.1	27.2	13.4	27.6	26.4	28.0	4.7	8.1	
	COLUMN %	8197.0	6337.0	311722.0	1283.0	213.0	1273.0	281.0	182.0	0.0	52168.0	
PERSONAL	ESTIMATE	8	9	3	20	47	20	46	59	0	2	
	% STD ERR	8.2	8.3	31.8	1.3	0.2	1.3	0.3	0.2	0.0	*	
	ROW %	45.7	54.9	34.6	7.3	4.4	7.1	24.1	17.4	0.0	44.8	
	COLUMN %	3510.0	217.0	4215.0	58.0	44.0	130.0	7.0	7.0	7.0	7647.0	
INSTRUCT.	ESTIMATE	13	48	12	65	105	62	320	320	320	6	
	% STD ERR	22.4	1.4	26.9	0.4	0.3	0.8	0.0	0.0	0.0	48.9	
	ROW %	19.6	1.9	4.6	0.3	0.9	0.7	0.6	0.7	2.2	6.1	
	COLUMN %	48.0	0.0	580.0	0.0	5.0	0.0	2.0	0.0	0.0	6.6	
AERIAL AP	ESTIMATE	55	0	29	0	136	0	52	0	0	7	
	% STD ERR	0.6	0.0	7.8	0.0	0.1	0.0	0.0	0.0	0.0	*	
	ROW %	0.3	0.0	0.6	0.0	0.1	0.0	0.2	0.0	0.0	5.9	
	COLUMN %	555.0	142.0	1078.0	252.0	76.0	261.0	0.0	0.0	0.0	2458.0	
AERIAL OB	ESTIMATE	31	54	23	44	65	43	0	0	0	10	
	% STD ERR	12.3	3.2	23.9	5.6	1.7	5.8	0.0	0.0	0.0	*	
	ROW %	3.1	1.2	1.2	1.5	1.6	1.4	0.5	0.0	0.0	2.1	
	COLUMN %	45.0	15.0	205.0	78.0	9.0	82.0	0.0	0.0	0.0	1522.0	
OTHR WORK	ESTIMATE	78	45	53	33	141	32	0	0	0	15	
	% STD ERR	2.4	0.8	11.0	4.2	0.5	4.4	0.0	0.0	0.0	*	
	ROW %	0.3	0.1	0.2	0.5	0.2	0.5	0.0	0.0	0.0	1.3	
	COLUMN %	56.0	6.0	694.0	302.0	48.0	311.0	0.0	0.0	0.0	1868.0	
COMMUTER	ESTIMATE	109	51	24	36	102	35	0	0	0	19	
	% STD ERR	5.0	0.5	*	27.0	4.3	27.8	0.0	0.0	0.0	5.4	
	ROW %	0.3	0.1	0.8	1.7	1.0	1.7	0.0	0.0	0.0	0.4	
	COLUMN %	633.0	155.0	4427.0	1546.0	318.0	1567.0	0.0	0.0	0.0	1624.0	

TABLE 2-28

NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP
(CONTINUED)

1982										PAGE 2 OF 2			
	L	L, MB	L, MB, GS	L, MB, GS, R	LRN	R	M	L, MB, GS, M	LRN, M	NO GROUP	ALL CRAFT		
AIR TAXI	ESTIMATE	26	59	10	16	36	16	0	0	0	16	7	
	% STD ERR	7.4	1.8	* 4.8	18.1	3.7	18.4	0.0	0.0	0.0	19.1	3.3	
	ROW %	3.5	1.3	9.0	6.5	8.7	0.0	0.0	0.0	0.0	1.4	3.3	
	COLUMN %	317.0	68.0	1458.0	817.0	259.0	868.0	18.0	18.0	15.0	2108.0	4768.0	
OTHER	ESTIMATE	41	74	18	22	44	21	156	156	187	15	9	
	% STD ERR	6.6	1.4	30.6	17.1	5.4	18.2	0.4	0.4	0.3	44.2	9	
	ROW %	1.8	0.6	1.6	4.7	5.3	4.8	1.5	1.7	4.7	1.8	1.8	
	COLUMN %	834.0	440.0	8365.0	47.0	0.0	47.0	0.0	0.0	0.0	2431.0	10116.0	
RENTAL	ESTIMATE	26	38	9	88	0	88	0	0	0	0	15	
	% STD ERR	8.2	4.3	*	0.5	0.0	0.5	0.0	0.0	0.0	0.0	24.0	
	ROW %	4.7	3.8	6.9	0.3	0.0	0.3	0.0	0.0	0.0	0.0	2.1	
	COLUMN %	1572.0	1244.0	3304.0	436.0	231.0	466.0	150.0	148.0	74.0	29269.0	35840.0	
INACTIVE	ESTIMATE	17	19	1	33	50	31	59	60	98	3	3	
	% STD ERR	4.4	3.5	9.2	1.2	0.6	1.3	0.4	0.4	0.2	*	*	
	ROW %	8.8	10.8	3.6	2.5	4.7	2.6	12.9	14.2	23.1	25.1	14.0	
	COLUMN %	17925.0	11538.0	91654.0	17271.0	4871.0	18018.0	1166.0	1045.0	321.0	116473.0	255367.0	
TOTALS	ESTIMATE	5	6	1	3	7	3	21	22	39	1	0	
	% STD ERR	7.0	4.5	35.9	6.8	1.9	7.1	0.5	0.4	0.1	45.6	0	
	ROW %	7981.0	1763.0	4506.0	27.0	144.0	32.0	36.0	15.0	15.0	67802.0	82090.0	

KEY

GROUP

L:	LOCALIZER	R:	RADAR ALTIMETER
MB:	MARKER BEACON	LRN:	LONG RANGE RNAV
GS:	GLIDE SLOPE	M:	MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
 * STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-29

NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP

1982										PAGE 1 OF 2									
	L	L, MB	L, MB, GS	L, MB, GS, R	LRN	R	M	M	L, MB GS, M	LRN, M	NO GROUP	ALL CRAFT							
1-49	ESTIMATE	8	4	23	2	0	2	0	0	0	0	0							
	% STD ERR	25.8	20.7	13.5	6.5	2.8	6.4	14.8	9.1	0.0	28.1	20.8							
	ROW %	3845.0	3251.0	21247.0	1839.0	523.0	1849.0	110.0	73.0	3.0	22234.0	52080.0							
	COLUMN %	11.8	12.4	4.8	17.3	31.0	17.2	67.0	93.6	79.2	4.6	2.8							
50-99	ESTIMATE	7	6	40	3	1	3	0	0	0	0	0							
	% STD ERR	20.3	28.2	23.2	8.5	10.7	9.2	9.4	7.0	0.9	19.1	20.4							
	ROW %	2134.0	2192.0	16806.0	1727.0	317.0	1729.0	197.0	195.0	0.0	10745.0	33609.0							
	COLUMN %	16.8	16.3	5.6	16.4	40.9	16.4	56.4	56.9	0.0	7.1	3.8							
100-149	ESTIMATE	6	6	50	5	0	5	0	0	0	0	0							
	% STD ERR	11.8	19.0	18.3	10.0	6.5	9.6	16.9	18.7	0.0	9.2	13.2							
	ROW %	845.0	744.0	9912.0	1458.0	287.0	1483.0	55.0	55.0	2.0	3668.0	16626.0							
	COLUMN %	25.8	27.5	7.4	18.6	39.0	18.4	58.8	58.8	160.4	11.9	5.6							
150-199	ESTIMATE	5	4	59	8	1	8	0	0	0	0	0							
	% STD ERR	4.7	6.4	10.8	8.4	5.9	8.2	4.7	5.3	0.6	3.1	6.5							
	ROW %	1116.0	386.0	8404.0	2242.0	294.0	2313.0	72.0	72.0	1.0	4473.0	14684.0							
	COLUMN %	23.8	39.6	9.3	14.4	39.0	14.2	99.0	99.0	350.8	11.3	6.0							
200-249	ESTIMATE	7	2	43	15	2	15	0	0	0	0	0							
	% STD ERR	6.2	3.3	7.0	13.0	6.0	12.8	6.2	6.9	0.3	3.8	5.8							
	ROW %	382.0	107.0	4134.0	1326.0	324.0	1355.0	12.0	12.0	0.0	2579.0	8557.0							
	COLUMN %	40.0	63.9	11.8	18.3	35.7	18.0	88.8	88.8	0.0	14.7	8.0							
250-299	ESTIMATE	4	1	48	15	3	15	0	0	0	0	0							
	% STD ERR	2.1	0.9	4.5	7.7	6.7	7.5	1.0	1.1	0.0	2.2	3.4							
	ROW %	828.0	486.0	4838.0	1385.0	375.0	1502.0	61.0	61.0	0.0	1818.0	9359.0							
	COLUMN %	27.3	32.5	10.9	17.7	33.6	16.9	87.7	87.7	0.0	17.2	7.6							
300-349	ESTIMATE	8	5	51	14	4	16	0	0	0	0	0							
	% STD ERR	4.6	4.2	5.3	8.0	7.7	8.3	5.2	5.8	0.0	1.6	3.7							
	ROW %	311.0	63.0	2848.0	1056.0	307.0	1119.0	30.0	30.0	30.0	1244.0	5525.0							
	COLUMN %	43.5	105.4	14.5	20.4	36.5	20.1	123.8	123.8	213.8	21.4	10.0							
350-399	ESTIMATE	5	1	51	19	5	20	0	0	0	0	0							
	% STD ERR	1.7	0.5	3.1	6.1	6.3	6.2	2.6	2.9	9.3	1.1	2.2							
	ROW %	633.0	262.0	2543.0	1242.0	311.0	1242.0	48.0	48.0	43.0	1493.0	6176.0							
	COLUMN %	33.0	47.5	15.7	17.8	36.9	17.8	95.8	95.8	100.5	19.9	9.6							

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TABLE 2-29

**NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP
(CONTINUED)**

1982										PAGE 2 OF 2			
		L	L, MB	L, NB, GS	L, MB, GS, R	LRN	R	N	L, MB, GS, M	LRN, M	ND GROUP	ALL CRAFT	
400-449	ESTIMATE	10	4	4.1	2.0	5	20	0	0	0	24	0	
	% STD ERR	3.5	2.3	2.8	7.2	6.4	6.8	4.1	4.8	13.4	1.3	2.4	
	ROW %	2038.0	423.0	7051.0	3752.0	1786.0	4111.0	216.0	216.0	114.0	8064.0	19541.0	
	COLUMN %	17.1	37.4	9.0	9.7	13.9	9.4	45.0	45.0	66.8	9.4	5.0	
450 UP	ESTIMATE	10	2	38	1.9	9	21	1	1	0	31	0	
	% STD ERR	11.4	3.7	7.7	21.7	36.7	22.8	18.5	20.7	35.5	5.2	7.7	
	ROW %	1572.0	1244.0	3304.0	436.0	231.0	466.0	150.0	148.0	74.0	29269.0	35840.0	
	COLUMN %	17.7	19.6	11.5	33.5	50.4	31.5	59.4	60.2	96.1	3.6	3.3	
INACTIVE	ESTIMATE	4	3	9	1	0	1	0	0	0	81	0	
	% STD ERR	8.8	10.8	3.6	2.5	4.7	2.6	12.9	14.2	23.1	25.1	14.0	
	ROW %	17925.0	11538.0	91654.0	17271.0	4871.0	18018.0	1166.0	1045.0	321.0	116473.0	255387.0	
	COLUMN %	5.4	6.6	1.6	3.8	7.8	3.7	21.0	22.3	39.6	1.2		
TOTALS	ESTIMATE	7	4	35	6	1	7	0	0	0	45	0	
	% STD ERR	*	*	*	*	*	*	*	*	*	*	*	
ROW %		13.8	28.3	4.7	8.5	20.6	8.4	32.6	32.6	74.4	8.4	3.2	

KEY

GROUP

L: LOCALIZER

R: RADAR ALTIMETER

MB: MARKER BEACON

LRN: LONG RANGE RNAV

GS: GLIDE SLOPE

M: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
 * STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-30

NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP

1982												PAGE 1 OF 2				
		L	L, MB	L, MB, GS	L, MB, GS, R	LRN	R	M	L, MB, GS, M	LRN, M	NO GROUP	ALL CRAFT				
0- 4 YRS	ESTIMATE	7	1	48	13	2	14	1	1	0	28	0	18.6	0	0	
	% STD ERR	19.8	7.9	25.1	37.7	26.2	37.1	50.0	35.8	11.5	0.0	20604.0	56175.0	18.6	0	
	ROW %	3393.0	1714.0	25303.0	5140.0	1293.0	5535.0	123.0	123.0	0.0	5.1	0.0	5.1	2.9	2.9	
	COLUMN %	13.8	19.5	4.6	9.9	20.5	9.6	69.1	69.1	0.0	0.0	0.0	0.0	0.0	0.0	
5- 9 YRS	ESTIMATE	6	3	45	9	2	9	0	0	0	36	0	22.0	0	0	
	% STD ERR	18.9	14.9	27.6	29.8	26.5	30.7	10.5	11.8	0.0	17.7	41.0	14651.0	35687.0	22.0	0
	ROW %	3048.0	2555.0	13113.0	2254.0	479.0	2428.0	45.0	45.0	41.0	124.4	6.0	6.0	3.7	3.7	
	COLUMN %	14.3	15.2	6.4	14.7	33.6	14.1	113.6	113.6	124.4	124.4	6.0	6.0	3.7	3.7	
10-14 YRS	ESTIMATE	8	7	36	6	1	6	0	0	0	41	0	14.0	0	0	
	% STD ERR	17.0	22.1	14.3	13.1	9.8	13.5	3.9	4.3	12.8	12.6	101.0	17796.0	42050.0	14.0	0
	ROW %	3207.0	2662.0	16225.0	2097.0	999.0	2201.0	249.0	249.0	101.0	17796.0	17796.0	17796.0	17796.0	17796.0	
	COLUMN %	13.6	13.9	5.5	14.9	20.9	14.3	43.7	43.7	73.8	73.8	5.3	5.3	3.2	3.2	
15-19 YRS	ESTIMATE	7	6	38	5	2	5	0	0	0	42	0	16.5	0	0	
	% STD ERR	17.9	23.1	17.7	12.1	20.5	12.2	21.4	23.8	31.5	15.3	68.0	10147.0	22087.0	16.5	0
	ROW %	1483.0	1702.0	8132.0	611.0	253.0	616.0	79.0	73.0	68.0	10147.0	10147.0	10147.0	10147.0	10147.0	
	COLUMN %	18.2	15.7	7.4	26.7	44.5	26.5	89.3	89.3	102.7	102.7	7.0	7.0	4.4	4.4	
20-24 YRS	ESTIMATE	6	7	36	2	1	2	0	0	0	45	0	8.6	0	0	
	% STD ERR	8.3	14.8	8.9	3.5	5.2	3.4	6.8	7.0	21.2	8.7	11.0	7527.0	13145.0	8.6	0
	ROW %	1012.0	1237.0	3097.0	172.0	31.0	202.0	103.0	9.0	11.0	7527.0	7527.0	7527.0	7527.0	7527.0	
	COLUMN %	25.8	22.4	12.4	37.8	62.7	32.9	74.6	134.0	137.9	137.9	9.0	9.0	6.5	6.5	
25-29 YRS	ESTIMATE	7	9	23	1	0	1	0	0	0	57	0	5.1	0	0	
	% STD ERR	5.6	10.7	3.4	1.0	0.6	1.1	8.8	0.9	3.4	6.5	6.5	6.5	5.1	5.1	
	ROW %	992.0	494.0	1283.0	84.0	83.0	89.0	27.0	6.0	3.0	6889.0	6889.0	6889.0	6889.0	6889.0	
	COLUMN %	22.2	24.4	15.0	61.2	61.9	58.1	93.3	128.3	202.1	202.1	8.2	8.2	6.5	6.5	
30-34 YRS	ESTIMATE	10	5	13	0	0	0	0	0	0	69	0	3.7	0	0	
	% STD ERR	5.5	4.3	1.4	0.5	1.7	0.5	2.3	0.6	0.9	5.7	5.7	5.7	5.7	5.7	
	ROW %	1411.0	537.0	1539.0	135.0	71.0	139.0	10.0	9.0	2.0	25485.0	25485.0	25485.0	25485.0	25485.0	
	COLUMN %	16.0	24.8	15.7	22.4	35.8	21.9	52.4	52.4	87.0	87.0	3.5	3.5	3.2	3.2	
35+ YRS	ESTIMATE	4	1	5	0	0	0	0	0	0	87	0	11.4	0	0	
	% STD ERR	7.9	4.7	1.7	0.8	1.5	0.8	0.9	0.9	0.6	21.9	21.9	21.9	21.9	21.9	
	ROW %	17925.0	11538.0	91654.0	17271.0	4871.0	18018.0	1166.0	1045.0	321.0	116473.0	116473.0	116473.0	116473.0	116473.0	
	COLUMN %	5.4	6.6	1.6	3.8	7.8	3.7	21.0	22.3	39.6	39.6	1.2	1.2	1.2	1.2	

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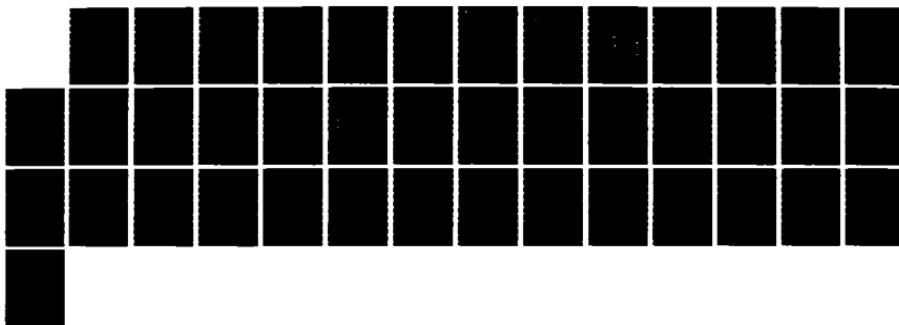
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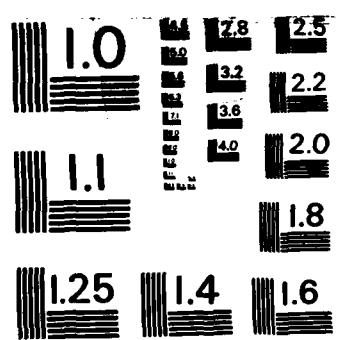
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UNCLASSIFIED





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

TABLE 2-30

NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP
(CONTINUED)

		1982						PAGE 2 OF 2				
		L	L, MB	L, MB, GS	L, MB, GS, R	LRN	R	M	L, MB, GS, M	LRN, M	NO GROUP	ALL CRAFT
TOTALS	ESTIMATE	7	4	35	6	1	7	0	0	0	45	0
	% STD ERR	*	7.0	*	9.0	*	9.0	7.0	7.0	7.0	*	*
	ROW %	39.5	39.0	46.7	244.9	79.3	244.9	314.2	314.2	314.2	4.4	4.3
	KEY											
	GROUP		GROUP									
	L:	LOCALIZER		R:	RADAR ALTIMETER							
	MB:	MARKER BEACON		LRN:	LONG RANGE RNAV							
	GS:	GLIDE SLOPE		M:	MICROWAVE LANDING SYSTEM							

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-31

NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP

1982										PAGE 1 OF 2			
	L	L, MB	L, MB, GS	L, MB, GS,R	LRN	R	M	L, MB, GS,M	LRN,M	NO GROUP	ALL CRAFT		
FIXED WING	ESTIMATE	8	17	11	119	64	108	108	207	1	0		
PISTON	% STD ERR	9.7	2.1	5.5	0.0	0.2	0.0	0.0	0.0	*	*		
ENG=1	ROW %	44.4	15.3	4.9	0.2	3.0	0.2	3.1	1.4	58.2	32.1		
1-3 SEATS	COLUMN %	8331.0	8519.0	88013.0	2285.0	580.0	2488.0	572.0	474.0	71.0	32704.0	118008.0	
FIXED WING	ESTIMATE	7	7	1	14	31	14	31	35	95	3	0	
PISTON	% STD ERR	7.1	7.2	* 73.8	1.9	0.5	2.1	0.5	0.4	0.1	27.7	0	
ENG=1	ROW %	48.5	73.0	72.0	13.2	11.9	13.8	49.1	45.4	22.1	28.1	48.2	
4+ SEATS	COLUMN %	317.0	745.0	13386.0	3471.0	282.0	3609.0	109.0	109.0	1.0	549.0	18499.0	
FIXED WING	ESTIMATE	39	26	3	11	43	11	75	75	350	29	0	
PISTON	% STD ERR	1.7	4.0	* 6.5	18.8	1.5	19.5	0.6	0.6	0.0	3.0	0	
ENG=2	ROW %	1.8	6.5	14.6	20.1	5.8	20.0	9.3	10.4	0.3	0.5	7.2	
1-6 SEATS	COLUMN %	335.0	74.0	5964.0	3029.0	236.0	3049.0	107.0	107.0	55.0	649.0	10081.0	
FIXED WING	ESTIMATE	36	50	5	9	36	9	67	67	98	17	0	
PISTON	% STD ERR	3.3	0.7	* 0.6	30.1	2.3	30.3	1.1	1.1	0.5	6.5	0	
ENG=2	ROW %	1.9	0.6	6.5	17.5	4.8	18.9	9.2	10.2	17.1	13.6	3.9	
7+ SEATS	COLUMN %	10.0	3.0	181.0	11.0	9.0	15.0	4.0	4.0	2.0	132.0	341.0	
FIXED WING	ESTIMATE	69	137	17	68	73	58	115	115	146	23	0	
PISTON	% STD ERR	2.9	0.9	* 0.0	0.2	3.2	2.6	4.4	1.2	0.6	38.7	0	
OTHER	ROW %	0.1	0.0	0.2	0.1	0.2	0.1	0.3	0.4	0.6	0.1	0.1	
1-12 SEAT	COLUMN %	0.0	77.0	579.0	3782.0	529.0	3888.0	74.0	74.0	12.0	4.0	4490.0	
FIXED WING	ESTIMATE	0	68	24	4	25	3	71	71	183	44	0	
TURBOPROP	% STD ERR	0.0	1.7	12.9	*	11.8	*	1.6	1.6	0.3	0.1	1.8	
ENG=2	ROW %	0.0	0.7	0.8	21.9	10.9	21.6	6.3	7.1	3.7	0.0	0.3	
1-12 SEAT	COLUMN %	0.0	0.0	0.0	184.0	417.0	211.0	458.0	52.0	2.0	0.0	642.0	
FIXED WING	ESTIMATE	0	0	0	33	15	30	13	70	70	332	0	
TURBOPROP	% STD ERR	0.0	0.0	0.0	28.7	*	32.9	*	8.1	8.1	0.3	0.0	
ENG=2	ROW %	0.0	0.0	0.0	0.2	2.4	4.3	2.5	4.5	5.0	0.6	0.3	
13+ SEATS	COLUMN %	6.0	3.0	40.0	23.0	15.0	29.0	0.0	0.0	0.0	133.0	205.0	
FIXED WING	ESTIMATE	12	315	71	95	129	76	0	0	0	24	0	
TURBOPROP	% STD ERR	2.9	1.5	19.5	11.2	7.3	14.1	0.0	0.0	0.0	*	*	
OTHER	ROW %	0.0	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.0	0.1	0.1	
13+ SEATS	COLUMN %	0.0	129.0	274.0	3072.0	1728.0	3201.0	132.0	132.0	86.0	0.0	3475.0	

TABLE 2-31

NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
(CONTINUED)

1982										PAGE 2 OF 2			
	L	L, MB	L, MB, GS	L, MB, GS, R	LRN	R	M	L, MB, GS, M	LRN, M	NO GROUP	ALL CRAFT		
FIXED WING TURBOJET ENG=2	ESTIMATE	0	58	39	4	11	3	57	57	.71	0	0	0
	% STD ERR	0.0	3.7	7.9	*	49.7	*	3.8	3.8	2.5	0.0	0.0	1.4
	ROW %	0.0	1.1	0.3	17.8	35.5	17.8	11.3	12.6	26.8	0.0	0.0	889.0
COLUMN %		2.0	44.0	134.0	679.0	782.0	679.0	76.0	76.0	30.0	30.0	30.0	889.0
	ESTIMATE	116	102	53	12	6	12	77	77	.77	.35	.34	0
	% STD ERR	0.2	4.9	15.1	*	16.1	3.6	8.5	8.5	23.7	0.0	0.0	0.3
ROW %	ROW %	0.0	0.4	0.1	3.9	0.0	2.0	5.0	0.0	0.0	5065.0	5065.0	5279.0
	COLUMN %		173.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	ESTIMATE	48	0	99	0	250	161	0	0	0	1	1	0
ROTORCRFT PISTON	% STD ERR	3.3	0.0	0.7	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	4.3
	ROW %	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
	COLUMN %		782.0	181.0	354.0	476.0	352.0	580.0	3.0	1.0	1.0	2435.0	4430.0
ROTORCRFT TURBINE	ESTIMATE	20	48	31	28	33	25	45	45	.98	.98	.98	0
	% STD ERR	17.7	4.1	8.0	10.7	7.9	12.6	0.1	0.0	0.0	0.0	0.0	*
	ROW %	4.4	1.6	0.4	2.8	7.2	3.1	0.3	0.1	0.3	0.3	0.3	1.7
COLUMN %			10.0	0.0	2.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	6970.0
	ESTIMATE	82	0	38	0	0	0	59	0	0	0	0	0
	% STD ERR	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	*
ROW %	ROW %	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	COLUMN %		17925.0	11538.0	91654.0	17271.0	4871.0	18018.0	1166.0	1045.0	321.0	116473.0	255387.0
	ESTIMATE	5	6	1	3	7	3	21	22	.39	1	0	0
ALL CRAFT	% STD ERR	7.0	4.5	35.9	6.8	1.9	7.1	0.5	0.4	0.1	45.6	45.6	0
	ROW %	17180.0	10466.0	70976.0	2495.0	939.0	2800.0	611.0	491.0	88.0	108011.0	209523.0	0.1
	COLUMN %	5.5	6.9	1.9	14.1	23.8	13.3	30.5	34.5	84.9	1.3	1.3	0.1

KEY

GROUP

GROUP

L: LOCALIZER

R: RADAR ALTIMETER

MB: MARKER BEACON

LRN: LONG RANGE RNAV

GS: GLIDE SLOPE

M: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-32

NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP

1982										PAGE 1 OF 2				
	L	L, MB	L, MB, GS	L, MB, GS, R	R	M	L, MB, GS, M	LRN, M	ND GROUP	ALL CRAFT				
ALASKAN	ESTIMATE	37	52	25	44	84	43	86	0	0	*	8		
	% STD ERR	4.8	2.9	9.2	3.1	0.8	3.2	1.2	0.0	5.6	3.2			
	ROW %	2.1	2.0	0.8	1.5	1.3	1.4	8.4	0.0	7854.0	15838.0			
CENTRAL	COLUMN %	1273.0	418.0	5447.0	837.0	147.0	850.0	19.0	0.0					
	ESTIMATE	22	31	10	24	53	23	89	0	0	8	5		
	% STD ERR	8.0	2.6	34.4	5.3	0.9	5.4	0.1	0.0	49.6				
EASTERN	ROW %	7.1	3.6	5.9	4.8	3.0	4.7	1.8	0.0	6.7	6.2			
	COLUMN %	2134.0	1319.0	10953.0	1984.0	739.0	2058.0	155.0	135.0	44.0	11580.0	28000.0		
	ESTIMATE	16	19	7	15	24	15	52	58	107	0	4		
EUROPEAN	% STD ERR	7.8	4.7	39.1	7.1	2.6	7.4	0.6	0.5	0.2	41.4			
	ROW %	11.9	11.4	12.0	11.5	15.2	11.4	13.3	12.9	13.7	9.9	11.0		
	COLUMN %	88.0	3.0	248.0	50.0	0.0	50.0	0.0	0.0	51.0	419.0			
GRT LAKES	ESTIMATE	91	483	47	96	0	96	0	0	0	79	35		
	% STD ERR	16.2	0.7	*	11.9	0.0	11.9	0.0	0.0	0.0	12.2			
	ROW %	0.4	0.0	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.2		
NEW ENG.	COLUMN %	2854.0	2631.0	15146.0	3041.0	758.0	3344.0	142.0	142.0	52.0	22712.0	46419.0		
	ESTIMATE	14	14	6	12	23	12	83	83	92	4	3		
	% STD ERR	6.1	5.7	32.6	1.6	1.6	7.2	0.3	0.3	0.1	48.8			
NTHWEST MT	ROW %	15.9	22.8	18.5	17.6	15.6	18.6	12.2	13.6	16.2	18.5	18.2		
	COLUMN %	1663.0	928.0	9135.0	13431.0	147.0	1421.0	183.0	183.0	56.0	19.0	4106.0	9325.0	
	ESTIMATE	29	32	14	26	42	26	93	93	177	11	7		
SOUTHERN	% STD ERR	7.7	6.4	33.3	1.8.5	3.4	8.6	0.6	0.6	0.2	44.0			
	ROW %	4.0	5.1	3.4	4.6	8.6	4.4	4.8	5.4	5.9	3.5	3.7		
	COLUMN %	2555.0	1759.0	18338.0	2801.0	850.0	2839.0	144.0	144.0	27.0	13570.0	26681.0		
2-155														

TABLE 2-32

**NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
(CONTINUED)**

		1982				PAGE 2 OF 2						
		L	L, MB	L, MB, GS	L, MB, GS, R	LRN	R	M	L, MB, GS, M	LRN, M	NO GROUP	ALL CRAFT
SOUTHWEST	ESTIMATE	13	20	6	10	20	10	50	55	91	5	3
	% STD ERR	8.9	3.5	33.7	11.1	2.9	11.2	0.6	0.4	0.2	42.3	
	ROW %	19.7	11.9	14.5	25.5	23.5	24.5	18.7	13.6	19.3	14.4	15.5
	COLUMN %	2387.0	2112.0	17042.0	2231.0	588.0	2250.0	144.0	142.0	18.0	19193.0	42885.0
WEST-PACIF	ESTIMATE	15	18	5	14	27	14	66	87	165	5	3
	% STD ERR	5.6	4.9	39.6	5.2	1.4	5.2	0.3	0.3	0.0	44.7	
	ROW %	13.3	18.3	18.6	12.9	12.1	12.5	12.3	13.6	5.6	16.5	16.8
	COLUMN %	17925.0	11538.0	91654.0	17271.0	4871.0	18018.0	1188.0	1045.0	321.0	116473.0	285387.0
TOTALS	ESTIMATE	5	6	1	3	7	3	21	22	39	1	0
	% STD ERR	7.0	4.5	35.9	6.8	1.9	7.1	0.5	0.4	0.1	45.6	
	ROW %	503.0	642.0	6180.0	7897.0	3040.0	8157.0	359.0	359.0	156.0	1026.0	1604.0
	KEY											
	GROUP											
	L:	LOCALIZER				R:	RADAR ALTIMETER					
	MB:	MARKER BEACON				LRN:	LONG RANGE RNAV					
	GS:	GLIDE SLOPE				M:	MICROWAVE LANDING SYSTEM					

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
 * STANDARD ERROR GREATER THAN 50 PERCENT.

APPENDIX A.1 FIRST MAILING COVER LETTER



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave. S.W.
Washington, D.C. 20591

February 1983

Dear Aircraft Owner:

Enclosed is the annual General Aviation Activity and Avionics Survey for calendar year 1982. Data collected in the survey will be used for performing safety analysis, for determining the demand for air traffic facilities and services, and for assessing the impact of proposed regulatory changes on the general aviation fleet.

The survey is being mailed to owners of a random sample of less than 15 percent of all general aviation aircraft. Because the sample is random, it is possible that more than one of your aircraft may be selected or that your aircraft may be selected in successive years. This may happen in particular when there are a small number of aircraft of the type that you own. When more than one of your aircraft are selected, you will find a separate questionnaire provided for each aircraft. Please answer all questions for the aircraft identified. If you cannot determine precisely an answer to a question, please make your best estimate.

If your aircraft was not in use during the year (e.g., in storage, dismantled, destroyed, exported, etc.) please check item 5, indicating the aircraft was not flown. If the aircraft was sold prior to January 1982, it would be quite helpful if you would write a note indicating this on the survey questionnaire. If your aircraft is operated principally by another (leased, etc.), please obtain the necessary information from the operator or forward these materials to that person or firm for completion.

Please return this questionnaire in the enclosed self-addressed postpaid envelope within 10 days. Because the survey is based on a sample of general aviation aircraft, your response is especially important to the accuracy of the results. A prompt response will eliminate the need for additional follow-up contacts. A high response rate will ensure the continued use of sampling methods to collect activity and avionics data.

The data gathered from this survey will be used only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records. We appreciate your cooperation.

Sincerely,

Nicholas L. Soldo
Nicholas L. Soldo
Acting Manager, Information and
Statistics Division, AMS-200

Enclosure

APPENDIX A.2 SECOND MAILING COVER LETTER



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

March 1983

Dear Aircraft Owner:

In February the Federal Aviation Administration sent aircraft owners a questionnaire as part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

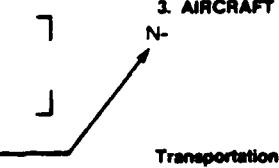
You were one of the aircraft owners selected at random to receive a questionnaire. As of this date, we have not received a response from you. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. If you have already responded, please disregard this notice. We appreciate your cooperation.

Sincerely,

Nicholas L. Soldo
Nicholas L. Soldo
Acting Manager, Information
and Statistics Division, AMS-200

Enclosure

APPENDIX A.3 SURVEY QUESTIONNAIRE

1. CONTROL NUMBER  U.S. Department of Transportation Federal Aviation Administration	GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY (As of December 31, 1982)	<i>Form Approved OMB No 2120-0060</i>																																																																	
<p>This report is authorized by Section 311 of the Federal Aviation Act of 1958 as amended. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate and timely. Information collected in this survey will be used for statistical purposes only and not to disclose individual aircraft activity.</p>		<p>2. a. <input type="checkbox"/> "X" here if this aircraft is an ultralight and GO TO QUESTION 4. b. <input type="checkbox"/> "X" here if you operate your aircraft principally as an air carrier (under FAR 121 or 127). If so, DO NOT complete remainder of form. However please return to address shown below.</p>																																																																	
 <p>3. AIRCRAFT CHARACTERISTICS</p> <p>Transportation Systems Center—GAF Kendall Square Cambridge, Massachusetts 02142</p>																																																																			
<p>4. What were the total lifetime airframe hours as of December 31, 1982? _____</p>		<p>5. Was aircraft flown in Calendar Year 1982? (Check one)</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to question 11)</p>																																																																	
<p>6. Did you own this aircraft for the entire year of 1982?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No If "No," include previous owner's hours for 1982 in your estimates below.</p>		<p>8. Of the total hours flown by this aircraft during Calendar Year 1982, what percentage was flown in each of the following conditions? (a, b, c, and d should add to 100%).</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Instrument Meteorological Condition (IMC) Day</td> <td style="width: 10%; text-align: right;">a. _____</td> </tr> <tr> <td>Instrument Meteorological Condition (IMC) Night</td> <td style="text-align: right;">b. _____</td> </tr> <tr> <td>Visual Meteorological Condition (VMC) Day</td> <td style="text-align: right;">c. _____</td> </tr> <tr> <td>Visual Meteorological Condition (VMC) Night</td> <td style="text-align: right;">d. _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">TOTAL</td> </tr> </table>		Instrument Meteorological Condition (IMC) Day	a. _____	Instrument Meteorological Condition (IMC) Night	b. _____	Visual Meteorological Condition (VMC) Day	c. _____	Visual Meteorological Condition (VMC) Night	d. _____	TOTAL																																																							
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TOTAL																																																																			
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<p>10. What was this aircraft's average rate of fuel consumption (gal./hr.) during 1982? (Report whole gals. only) _____</p>		<p>11. In what state (Abbreviation) or foreign country was this aircraft based as of December 31, 1982? _____</p>																																																																	
<p>12. AVIONICS EQUIPMENT CAPABILITY (<input type="checkbox"/> ALL boxes that reflect this aircraft's current capability. If none, check the last box in each group.)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="width: 60%;">VHF COMMUNICATIONS EQUIPMENT</td> <td style="width: 40%;"></td> </tr> <tr> <td>VHF Communications System</td> <td colspan="2"></td> </tr> <tr> <td>360 Channels or less</td> <td style="text-align: right;">a. _____</td> </tr> <tr> <td>720 Channels or more</td> <td style="text-align: right;">b. _____</td> </tr> <tr> <td>More than one comm. system</td> <td style="text-align: right;">c. _____</td> </tr> <tr> <td>No VHF Communications Equipment</td> <td style="text-align: right;">d. _____</td> </tr> <tr> <td colspan="2">TRANSPONDER EQUIPMENT</td> <td></td> </tr> <tr> <td>4096 Code</td> <td style="text-align: right;">e. _____</td> </tr> <tr> <td>Altitude Encoding Equipment</td> <td style="text-align: right;">f. _____</td> </tr> <tr> <td>No Transponder Equipment</td> <td style="text-align: right;">g. _____</td> </tr> <tr> <td colspan="3">NAVIGATION EQUIPMENT</td> </tr> <tr> <td>VOR Receiver</td> <td colspan="2"></td> </tr> <tr> <td>100 Channels</td> <td style="text-align: right;">h. _____</td> </tr> <tr> <td>200 Channels</td> <td style="text-align: right;">i. _____</td> </tr> <tr> <td>More than one VOR Receiver</td> <td style="text-align: right;">j. _____</td> </tr> <tr> <td>Automatic Direction Finder (ADF)</td> <td style="text-align: right;">k. _____</td> </tr> <tr> <td>Distance Measuring Equipment (DME)</td> <td style="text-align: right;">l. _____</td> </tr> <tr> <td>Area Navigation Equipment (RNAV)</td> <td style="text-align: right;">m. _____</td> </tr> <tr> <td>Long Range Nav (Doppler, INS, Other)</td> <td style="text-align: right;">n. _____</td> </tr> <tr> <td>Flight Director</td> <td style="text-align: right;">o. _____</td> </tr> <tr> <td>Radar Altimeter</td> <td style="text-align: right;">p. _____</td> </tr> <tr> <td>Flight Management Computer</td> <td style="text-align: right;">q. _____</td> </tr> <tr> <td>No Navigation Equipment</td> <td style="text-align: right;">r. _____</td> </tr> <tr> <td colspan="3">ILS RECEIVING EQUIPMENT</td> </tr> <tr> <td>Localizer</td> <td style="text-align: right;">s. _____</td> </tr> <tr> <td>Marker Beacon</td> <td style="text-align: right;">t. _____</td> </tr> <tr> <td>Glide Slope</td> <td style="text-align: right;">u. _____</td> </tr> <tr> <td>Microwave Landing System</td> <td style="text-align: right;">v. _____</td> </tr> <tr> <td>No ILS Receiving Equipment</td> <td style="text-align: right;">w. _____</td> </tr> </table>				VHF COMMUNICATIONS EQUIPMENT			VHF Communications System			360 Channels or less	a. _____	720 Channels or more	b. _____	More than one comm. system	c. _____	No VHF Communications Equipment	d. _____	TRANSPONDER EQUIPMENT			4096 Code	e. _____	Altitude Encoding Equipment	f. _____	No Transponder Equipment	g. _____	NAVIGATION EQUIPMENT			VOR Receiver			100 Channels	h. _____	200 Channels	i. _____	More than one VOR Receiver	j. _____	Automatic Direction Finder (ADF)	k. _____	Distance Measuring Equipment (DME)	l. _____	Area Navigation Equipment (RNAV)	m. _____	Long Range Nav (Doppler, INS, Other)	n. _____	Flight Director	o. _____	Radar Altimeter	p. _____	Flight Management Computer	q. _____	No Navigation Equipment	r. _____	ILS RECEIVING EQUIPMENT			Localizer	s. _____	Marker Beacon	t. _____	Glide Slope	u. _____	Microwave Landing System	v. _____	No ILS Receiving Equipment	w. _____
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APPENDIX B

SAMPLE DESIGN

B.1 SAMPLE FRAME AND SIZE

The Aircraft Registration Master File, maintained by the FAA Mike Monroney Aeronautical Center in Oklahoma City, provided the sample frame, the list of aircraft from which the sample was selected, for the survey. This file is the official record of registered civil aircraft in the U.S., containing one record per aircraft.

Between the 1977 and 1978 survey cycles several changes occurred to this file which had an impact on the sample population and frame, and ultimately on the survey results. In January 1978, FAA implemented a new procedure for maintaining the file, known as triennial revalidation. Instead of requiring all owners to revalidate and update their aircraft registration annually, FAA required revalidation for only those owners who had not contacted the registry for three years. The less frequent updating affected the accuracy of the file and its representativeness. Two major consequences for the survey results are discussed below:

- 1) The accuracy of owners' addresses deteriorated, causing the percentage of questionnaires returned by the post office to almost triple from 1977 to 1982. This partially accounted for the lower survey response rates experienced since 1977.
- 2) The file contained a residue of aircraft which under the old revalidation system would have been deregistered and purged from the file, but remained under the new system. Consequently, the population counts were inflated resulting in artificially large increases in the estimates of the number of active general aviation aircraft from 1977 to 1978, and from 1978 to 1979.

Also during this period the entire Aircraft Registration System was installed on a new computer system. At the same time, FAA modified many of the updating and processing procedures. It is quite possible that these changes affected the registration file, although it is not known in what way.

Finally, new legislation required two categories of aircraft, formerly ineligible, to be registered with the U.S. Registry, namely:

- 1) aircraft owned by individual citizens of foreign countries who are permanent residents of the U.S., and
- 2) aircraft owned by non-U.S corporations which are organized and doing business under U.S. law as long as the aircraft are based and used primarily in the U.S.

The definition of a registered general aviation aircraft changed from 1977 to 1978 to include the two new groups. It is estimated that these aircraft comprise less than one half percent of the general aviation fleet.

Thus, these changes discussed above affected the contents of the Aircraft Registration Master File and consequently the survey results. While it is difficult to quantify the effects of the changes, FAA estimates that they caused the survey results to overestimate population and hours flown by not more than five percent.

All aircraft identified as general aviation in the file according to the definition in Section 1.2.1 comprise the sample frame with the following exceptions:

- 1) Aircraft registered to dealers.
- 2) Aircraft with "Sale Reported" or "Registration Pending" appearing in the record instead of the owner's name.
- 3) Aircraft with a known inaccurate owner's address.
- 4) Aircraft with missing state of registration, aircraft make-model-series code, or aircraft type information.

For calendar year 1982, the sample frame consisted of 255,367 general aviation aircraft records from which 26,067 records were sampled, yielding a 10.2 percent sample. Table B-1 and Figure B.1 show the distribution of the sample compared to that of the population by aircraft type. Table B-2 and Figure B.2 show similar distributions by FAA region. (See Appendix C for the FAA regional map.) These displays clearly demonstrate the disproportionality of the sample to the population, an intended result of the sample design to gain efficiency and to control errors.

B.2 DESCRIPTION OF SAMPLE DESIGN

The sample design employed was a stratified, systematic design from a random start. The sample was selected from a two-way stratified frame matrix. The two stratification criteria were:

- 1) State or territory of aircraft registration.
- 2) A variable called the make-model index constructed from a combination of the computed aircraft type, the Service Difficulty Reporting (SDR) aircraft manufacturer/model group, and the FAA make-model-series of the aircraft.

The 54 levels of the state criterion and the 289 levels of the make-model index yielded a matrix of 54 by 289 or 15,606 cells (strata) among which the frame was divided for sampling.

The FAA's primary requirement was for estimates of mean annual flight hours per aircraft, necessitating optimal determination of sample sizes based on flight hour variation by state and by make-model index, and not on population. Hence, the sample was not proportional to size, and a sampling fraction was determined for each cell with a non-zero population. Sampling was then performed systematically from a random start within individual cells, yielding a final sample size of 26,067 general aviation aircraft.

Initially, each aircraft in the sample was given a weight which was the inverse of its cell's sampling fraction, which corresponded to the number of aircraft in the sample frame represented by that aircraft. When all responses to the survey

TABLE B-1. SAMPLE AND POPULATION DISTRIBUTIONS BY AIRCRAFT TYPE

TYPE	POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Fixed Wing			
Piston			
1 engine, 1-3 seats	82,090	9,989	12.2
1 engine, 4+ seats	118,008	9,216	7.8
2 engines, 1-6 seats	18,469	1,588	8.6
2 engines, 7+ seats	10,061	1,933	19.2
Other Piston	341	201	58.9
Turboprop			
2 engines, 1-12 seats	4,490	251	5.6
2 engines, 13+ seats	643	59	9.2
Other Turboprop	205	72	35.1
Turbojet			
2 engines	3,475	149	4.3
Other Turbojet	889	95	10.7
Rotorcraft			
Piston	5,279	1,149	21.8
Turbine	4,432	533	12.0
Other	6,985	832	11.9
TOTAL	255,367	26,067	10.2

TABLE B-2. SAMPLE AND POPULATION DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

REGION	APPROXIMATE POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Alaskan	7,873	1,337	17.0
Central	15,767	1,644	10.4
Eastern	28,168	2,998	10.6
European (Foreign)	527	130	24.7
Great Lakes	46,376	3,955	8.5
New England	9,271	1,721	18.6
Northwest Mountain	26,675	2,474	9.3
Southern	38,498	4,428	11.5
Southwestern	39,520	2,394	6.1
Western-Pacific	42,647	4,986	11.7
TOTAL	255,367	26,067	10.2

Note: Column summations may differ from printed totals due to estimation procedures.

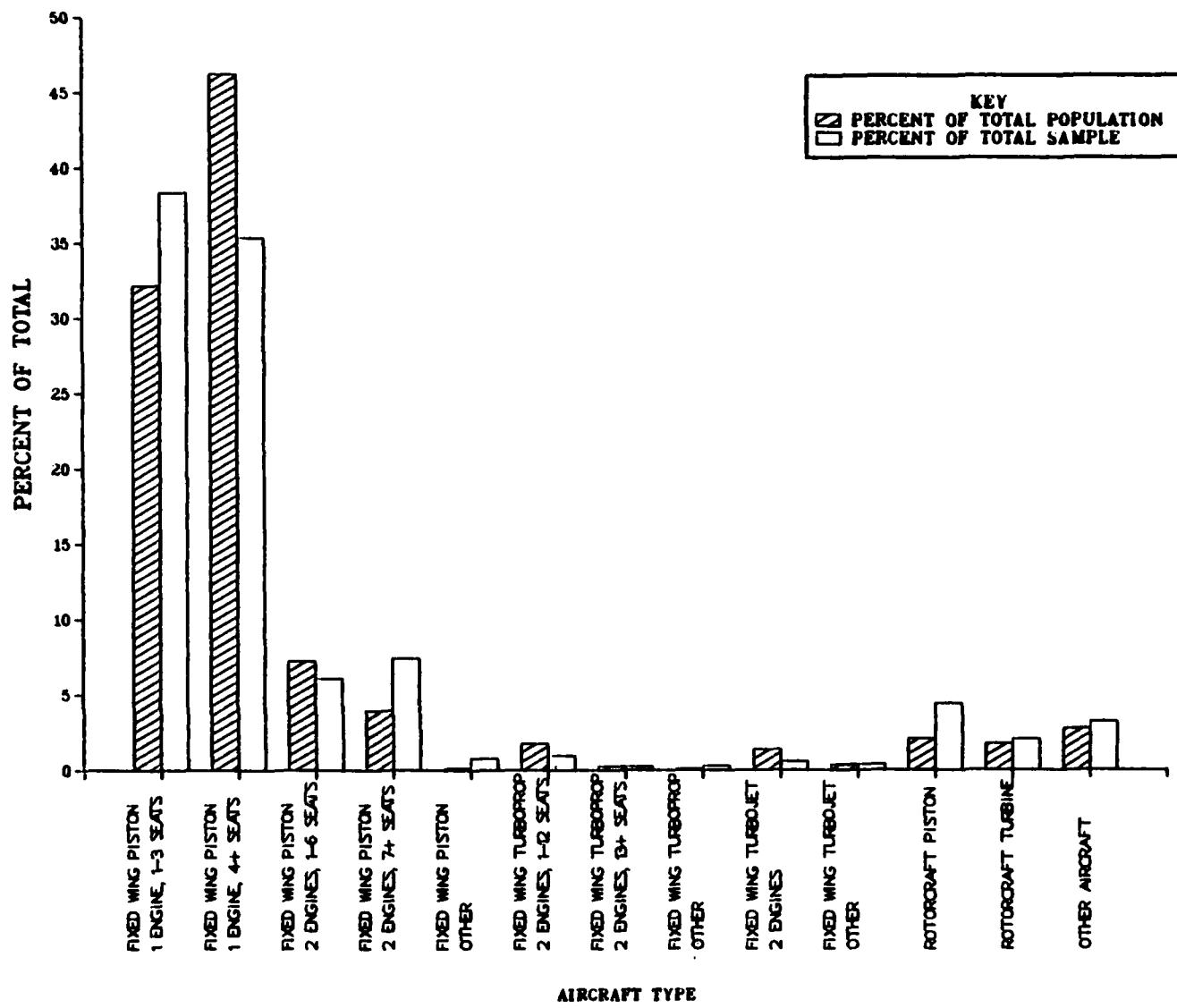


FIGURE B-1. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY AIRCRAFT TYPE

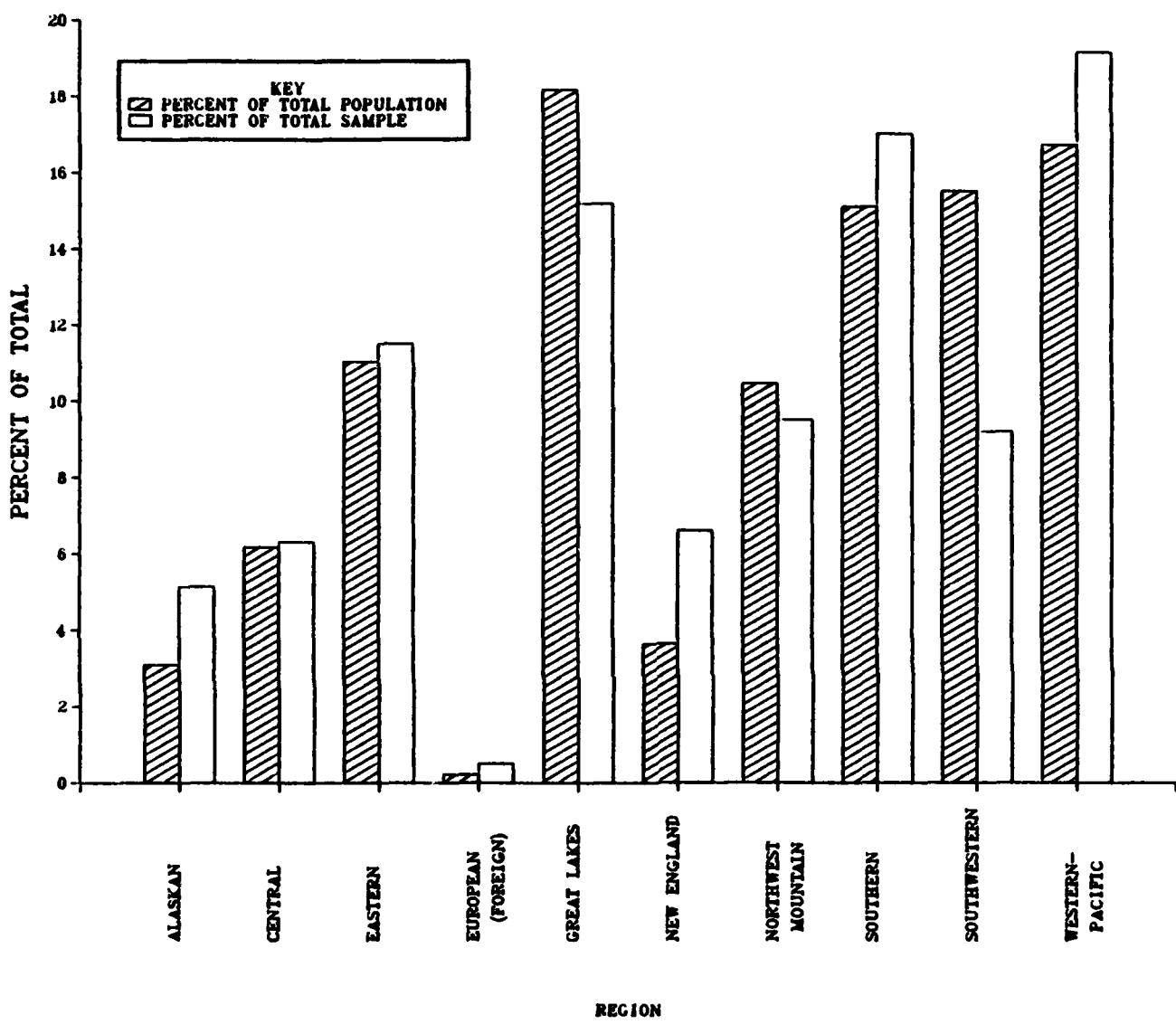


FIGURE B-2. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT.

were tallied, each weight was adjusted according to the response rate for the cell, counting an aircraft for which no survey questions were answered as a non-respondent and an aircraft for which at least one question was answered as a respondent. The weight adjustment is described below:

- 1) Non-respondents' weights were changed to zero.
- 2) The weights of all responding aircraft were adjusted uniformly by dividing the initial weight by the response rate for the cell.

This method of weight adjustment has several attributes. It actually incorporates the response rates into the final weights and simplifies estimation procedures.

B.3 ERROR

Errors associated with estimates derived from sample survey results fall into two categories: sampling and non-sampling errors.¹ Sampling errors occur because the estimates are based on a sample — not the entire population. Non-sampling errors arise from a number of sources such as non-response, inability or unwillingness of respondents to provide correct information, differences in interpretation of questions, mistakes in recording or coding the data obtained, and others. The following sections discuss the two types of errors.

B.3.1 Sampling Error

In a designed survey, the sampling error associated with an estimate is generally unknown, but a measurable quantity known as the standard error is often used as a guide to the magnitude of sampling error. The standard error measures the variation which would occur among the estimates from all possible samples of the same design from the same population. It thus measures the precision with which an estimate approximates the average result of all possible samples or the result of a survey in which all elements of the population were sampled.

Through sample design techniques, the statistician can control the sizes of standard errors on a few key variables, known as design variables, in the survey. In the General Aviation Activity and Avionics Survey, the design variables were the mean annual hours flown per aircraft by aircraft type, by aircraft manufacturer/model group, and by state of aircraft registration. The sample was designed to produce standard errors on these variables at levels specified by the FAA. No controls were placed on the standard errors of the non-design variables.

Thus, every estimate resulting from a sample survey, whether it be for a design or non-design variable, has sampling error associated with it. The user of survey results must consider this error along with the point estimate itself when making inferences or drawing conclusions about the sample population. A large standard error relative to an estimate indicates lack of precision and, inversely, a small standard error indicates precision. To facilitate the comparison of estimates and their errors, the tables in Section 2 of this publication display standard errors for all estimated quantities. In some cases, the tables contain the percent standard error, which is the standard error multiplied by one hundred divided by the corresponding estimate.

¹Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, (Washington, DC, 1974), pp. 11-14

The paragraphs below explain the proper interpretation and use of the errors.

An estimate and its standard error make it possible to construct an interval estimate with prescribed confidence that the interval will include the average value of the estimate from all possible samples of the population. Table B-3 below shows selected interval widths and their corresponding confidence.

TABLE B-3. CONFIDENCE OF INTERVAL ESTIMATES

WIDTH OF INTERVAL	APPROXIMATE CONFIDENCE THAT INTERVAL INCLUDES AVERAGE VALUE
1 Standard error	68%
2 Standard errors	95%
3 Standard errors	99%

As an example, from Table 2-6 a 95 percent confidence interval for the number of active rotorcraft with piston engines would be $2419 \pm 2(178)$ or (2063, 2775). One would say that the number of active rotorcraft with piston engines lies somewhere between 2063 and 2775 with 95 percent confidence.

B.3.2 Non-Sampling Error

Non-sampling error can be reduced through survey design, although the amount of reduction is difficult, if not impossible, to quantify in any given design. Nevertheless, through controlled experiments, various techniques have been identified which limit non-sampling error. Several of these techniques were incorporated into the design of the general aviation survey and are itemized below:

- o A second mailing to non-respondents was conducted in addition to the original mailing to improve the response rate, since a low response rate is a major cause of non-sampling error. Sixty-eight percent of those aircraft sampled responded to at least one question of the survey. This represents an increase over the 61 percent response obtained in 1981. However, the 1982 rate marks a decline over the 80 percent response achieved in 1977, the first year of the survey. Possible causes of the decrease include:
 - 1) The deterioration of the currency of aircraft owners' addresses in the Aircraft Registration Master File, the sample frame. This increased the percentage of questionnaires returned undelivered by the postmaster from around 1.6% in 1977 to 3.2% in 1978 to 6.8% in 1981, hence decreasing the response rate. The percentage of postmaster returns for 1982 (4.6%) marks a decline from the 1981 level. This explains in part the increase in the 1982 survey response rate.

- 2) Repeated sampling of aircraft in two and possibly three or four successive years. Due to the design of the sample to achieve specified precision in estimates for states and manufacturer/model groups of aircraft, it is impossible to avoid sampling some of the same aircraft in consecutive years. Owners of such aircraft may have been less willing to respond in 1982 than in previous years.

Tables B-4 and B-5 show the response rates broken down by FAA region and aircraft type, respectively. The lowest response rate for any region was 48% for the European (Foreign) region due to mail delivery difficulties. The Alaskan Region rate was low at 59% for similar reasons. These two regions together, however, represented only about 3% of the U.S. general aviation fleet. The fixed wing twin engine piston aircraft with 7 or more seats had the lowest response rate (at 52%) of any of the aircraft types but these aircraft represented less than 4% of the fleet.

- o The survey questionnaire was designed and tested to minimize misinterpretation of questions by the aircraft owners.
- o To assure the owners of the confidentiality of their responses, the questionnaire cover letter informed them that the intended use of the responses was "only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records."¹
- o Comprehensive editing procedures insured the accuracy of the data transcription to machine readable form and the internal consistency of responses.
- o The official and most accurate source of information available on the general aviation fleet, the FAA Aircraft Registration Master File, was used as the sampling frame.

¹See Appendix A.1.

TABLE B-4. RESPONSE RATES BY REGION

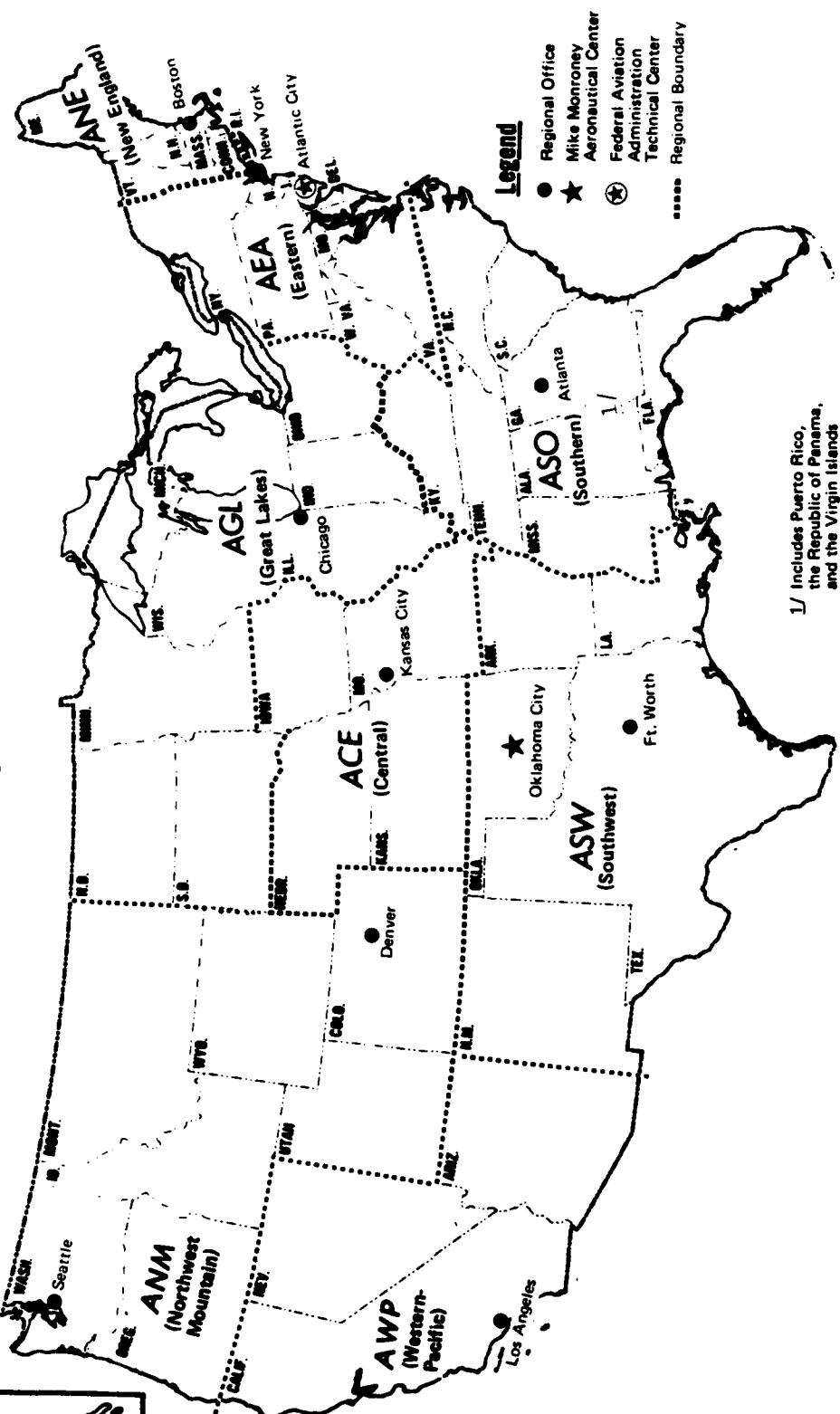
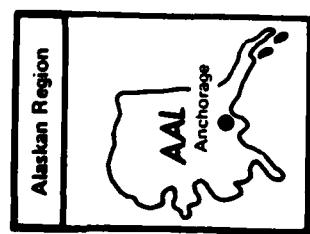
REGION	RESPONSE RATE (%)	REGION	RESPONSE RATE (%)
Alaskan	59	New England	71
Central	73	Northwest Mountain	65
Eastern	72	Southern	63
European (Foreign)	48	Southwestern	64
Great Lakes	75	Western-Pacific	67
		TOTAL	68

TABLE B-5. RESPONSE RATES BY AIRCRAFT TYPE

AIRCRAFT TYPE	RESPONSE RATE (%)	AIRCRAFT TYPE	RESPONSE RATE (%)
Fixed Wing			
Piston		Turbojet	
1 engine, 1-3 seats	71	2 engines	68
1 engine, 4+ seats	70	Other	55
2 engines, 1-6 seats	63		
2 engines, 7+ seats	52	Rotorcraft	
Other	55	Piston	64
Turboprop		Turbine	68
2 engines, 1-12 seats	67	Other	69
2 engines, 13+ seats	64		
Other	61	TOTAL	68

U.S. DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
FAA REGIONAL BOUNDARIES
Including Locations of Regional Headquarters and Centers

APPENDIX C. FAA REGIONAL BOUNDARIES



1/ Includes Puerto Rico,
the Republic of Panama,
and the Virgin Islands

APPENDIX D

SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) AIRCRAFT GROUP NAMES AND THE FAA AIRCRAFT MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN SEVERAL OF THE TABLES IN THE BODY OF THIS REPORT.

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA
ADAMS A505	0050101	ARCTICS1A	1850208	BAC	111
ADAMS A505	0050105	ARCTICS1A	1850210	BAC	111
AEROSPAS355	8680805	ARCTICS1A	1850212	BAC	111
AEROSPAS355	8680806	ARCTICS1A	1850214	BAC	111
AEROSPAS116	8630207	ARCTICS1A	1850218	BAC	111
AEROSPAS116	8680209	ARCTICS1B1	1850302	BAC	111
AEROSPAS116	8680512	ARCTICS1B1	1850304	BAC	111
AEROSPAS116	8680513	ARCTICS1B1	1850306	BAC	111
AEROSPAS116	8680515	ARCTICS1B1	1850308	BAC	111
AEROSPAS116	8630605	ARCTICS1B1	1850310	BAC	111
AEROSPAS116	8680615	ARCTICS1B1	1850312	BAC	111
AGUSTAA109	0250109	ARONCA15	0191202	BALWKSFIREFY	1050100
AIRPTSA	0144202	ARONCA15	0191204	BALWKSFIREFY	1050101
AIRPTSA	0144204	ARONCA58	0191002	BALWKSFIREFY	1050103
AIRPTSA	0144206	ARONCA58	0191004	BALWKSFIREFY	1050104
AIRPTSA	1850102	ARONCA58	0191006	BALWKSFIREFY	1050107
AIRPTSA	1850104	ARONCA58	0191008	BALWKSFIREFY	1050109
AIRPTSA	1850106	ARONCA58	0191010	BALWKSFIREFY	10501A9
AIRPTSA	1850108	ARONCA58	0191012	BEAGLEB206	1121223
AIRPTSA	1850110	ARONCA65	0190710	BEAGLEB206	1121224
AIRPTSA	1850112	ARONCA65	0190802	BEECH 100	*100
AIRPTSA	1850114	ARONCA65	0190902	BEECH 100	1152915
AIRPTSA	1850115	ARONCA65	0190904	BEECH 100	1152916
AIRPTSA	1850118	ARONCA65	0190906	BEECH 100	1152917
AIRPTSA	1850120	ARONCA65	0190908	BEECH 100	1152919
AIRPTSA	1850122	ARONCA65	0190910	BEECH 17	1150502
AIRPTSA	4570424	ARONCA65	0190912	BEECH 17	1150504
AIRPTSA	4570602	ARONCA65	0190914	BEECH 17	1150506
AIRPTSA	4570604	ARONCA65	0190916	BEECH 17	1150508
AIRPTSA	4570606	ARONCA65	0190918	BEECH 17	1150510
AIRPTSA	4570608	ARONCA65	0191014	BEECH 17	1150512
AIRPTSA	4570610	ARONCA65	0191016	BEECH 17	1150514
AIRPTSA	4570612	ARONCAC3	0190302	BEECH 17	1150516
AIRPTSA	4570614	ARONCAC3	0190304	BEECH 17	1150518
AIRPTSA	4570616	AVIAN FALCON	0900102	BEECH 17	1150520
AIRPTSA	4570618	AVTANWSKYHWK	0900104	BEECH 17	1150522
AIRPTSA	4570820	AYRES S2	0143002	BEECH 17	1150524
AIRPTSA	4570622	AYRES S2	0143004	BEECH 17	1150526
AIRPTSA	4570624	AYRES S2	0143006	BEECH 17	1150528
AIRSPC18	0440102	AYRES S2	0143008	BEECH 17	1150530
AIRSPC18	0440104	AYRES S2	0143010	BEECH 17	1150532
AIRSPC18	9200202	AYRES S2	0143012	BEECH 17	1150534
AIRTRCAT300	0390101	AYRES S2	0143022	BEECH 17	1150536
AIRTRCAT300	0390103	AYRES S2	0970100	BEECH 17	1150538
AIRTRCAT300	0390104	AYRES S2	0970101	BEECH 17	1150540
AIRTRCAT400	0390202	AYRES S2	0970104	BEECH 17	1150542
AIRTRCAT400	0390203	AYRES S2	0970105	BEECH 17	1150544
AMD FALC10	*FALC10	AYRES S2	0970107	BEECH 17	1150546
AMD FALC10	2730101	AYRES S2	0970202	BEECH 17	1150548
AMD FALC20	*FALC20	AYRES S2	0970210	BEECH 17	1150550
AMD FALC20	2720302	AYRES S2	0970215	BEECH 17	1150552
AMD FALC20	2720303	AYRES S2	7630202	BEECH 17	1150554
AMD FALC20	2720304	AYRES S2	7630203	BEECH 17	1150556
AMD FALC20	2720305	AYRES S2	8380202	BEECH 17	1150558
AMD FALC20	2720306	AYRES S2	8380204	BEECH 17	1150560
AMD FALC20	2730103	AYRES S2	8380206	BEECH 17	1150562
AMD FALC50	2730108	AYRES S2	8380302	BEECH 17	1150564
AMTR TMK	4220120	AYRES S2	8330306	BEECH 18	*18
ARCTICS1A	1850202	AYRES S2T	0970106	BEECH 18	1150202
ARCTICS1A	1850204	BAC 111	*111	BEECH 18	1150204
ARCTICS1A	1850206	BAC 111	1480202	BEECH 18	1150602

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BEECH 18	1150604	BEECH 18	1150202	BEECH 18	1151050
BEECH 18	1150702	BEECH 18	1150204	BEECH 18	1151102
BEECH 18	1150704	BEECH 18	1150602	BEECH 18	* 18
BEECH 18	1150706	BEECH 18	1150804	BEECH 18	1150202
BEECH 18	1150708	BEECH 18	1150702	BEECH 18	1150204
BEECH 18	1150710	BEECH 18	1150704	BEECH 18	1150602
BEECH 18	1150712	BEECH 18	1150706	BEECH 18	1150604
BEECH 18	1150802	BEECH 18	1150708	BEECH 18	1150702
BEECH 18	1150804	BEECH 18	1150710	BEECH 18	1150704
BEECH 18	1150806	BEECH 18	1150712	BEECH 18	1150706
BEECH 18	1150808	BEECH 18	1150802	BEECH 18	1150708
BEECH 18	1150902	BEECH 18	1150804	BEECH 18	1150710
BEECH 18	1150904	BEECH 18	1150806	BEECH 18	1150712
BEECH 18	1150906	BEECH 18	1150808	BEECH 18	1150802
BEECH 18	1150907	BEECH 18	1150902	BEECH 18	1150804
BEECH 18	1150908	BEECH 18	1150904	BEECH 18	1150806
BEECH 18	1150909	BEECH 18	1150906	BEECH 18	1150808
BEECH 18	1150910	BEECH 18	1150907	BEECH 18	1150902
BEECH 18	1150911	BEECH 18	1150908	BEECH 18	1150904
BEECH 18	1150912	BEECH 18	1150909	BEECH 18	1150906
BEECH 18	1150913	BEECH 18	1150910	BEECH 18	1150907
BEECH 18	1150914	BEECH 18	1150911	BEECH 18	1150908
BEECH 18	1150916	BEECH 18	1150912	BEECH 18	1150909
BEECH 18	1150918	BEECH 18	1150913	BEECH 18	1150910
BEECH 18	1150920	BEECH 18	1150914	BEECH 18	1150911
BEECH 18	1150922	BEECH 18	1150916	BEECH 18	1150912
BEECH 18	1150924	BEECH 18	1150918	BEECH 18	1150913
BEECH 18	1150926	BEECH 18	1150920	BEECH 18	1150914
BEECH 18	1150928	BEECH 18	1150922	BEECH 18	1150916
BEECH 18	1150930	BEECH 18	1150924	BEECH 18	1150918
BEECH 18	1150932	BEECH 18	1150926	BEECH 18	1150920
BEECH 18	1151001	BEECH 18	1150928	BEECH 18	1150922
BEECH 18	1151002	BEECH 18	1150930	BEECH 18	1150924
BEECH 18	1151004	BEECH 18	1150932	BEECH 18	1150926
BEECH 18	1151006	BEECH 18	1151001	BEECH 18	1150928
BEECH 18	1151007	BEECH 18	1151002	BEECH 18	1150930
BEECH 18	1151008	BEECH 18	1151004	BEECH 18	1150932
BEECH 18	1151009	BEECH 18	1151006	BEECH 18	1151001
BEECH 18	1151010	BEECH 18	1151007	BEECH 18	1151002
BEECH 18	1151011	BEECH 18	1151008	BEECH 18	1151004
BEECH 18	1151012	BEECH 18	1151009	BEECH 18	1151006
BEECH 18	1151013	BEECH 18	1151010	BEECH 18	1151007
BEECH 18	1151014	BEECH 18	1151011	BEECH 18	1151008
BEECH 18	1151015	BEECH 18	1151012	BEECH 18	1151009
BEECH 18	1151016	BEECH 18	1151013	BEECH 18	1151010
BEECH 18	1151018	BEECH 18	1151014	BEECH 18	1151011
BEECH 18	1151019	BEECH 18	1151015	BEECH 18	1151012
BEECH 18	1151020	BEECH 18	1151016	BEECH 18	1151013
BEECH 18	1151021	BEECH 18	1151018	BEECH 18	1151014
BEECH 18	1151022	BEECH 18	1151019	BEECH 18	1151015
BEECH 18	1151023	BEECH 18	1151020	BEECH 18	1151016
BEECH 18	1151024	BEECH 18	1151021	BEECH 18	1151018
BEECH 18	1151026	BEECH 18	1151022	BEECH 18	1151019
BEECH 18	1151040	BEECH 18	1151023	BEECH 18	1151020
BEECH 18	1151042	BEECH 18	1151024	BEECH 18	1151021
BEECH 18	1151044	BEECH 18	1151026	BEECH 18	1151022
BEECH 18	1151046	BEECH 18	1151040	BEECH 18	1151023
BEECH 18	1151048	BEECH 18	1151042	BEECH 18	1151024
BEECH 18	1151050	BEECH 18	1151044	BEECH 18	1151026
BEECH 18	1151102	BEECH 18	1151046	BEECH 18	1151040
BEECH 18	* 18	BEECH 18	1151048	BEECH 18	1151042

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BEECH 18	1151044	BEECH 35	1151550	BEECH 80	1152809
BEECH 18	1151046	BEECH 36	1151602	BEECH 80	1152812
BEECH 18	1151048	BEECH 36	1151603	BEECH 80	1152814
BEECH 18	1151050	BEECH 36	1151604	BEECH 80	1153010
BEECH 18	1151102	BEECH 36	1151605	BEECH 90	*90
BEECH 200	*200	BEECH 36	1151606	BEECH 90	1152902
BEECH 200	1152920	BEECH 36	1151607	BEECH 90	1152907
BEECH 200	1152922	BEECH 45	1152002	BEECH 90	1152908
BEECH 200	1152924	BEECH 45	1152004	BEECH 90	1152909
BEECH 200	1152926	BEECH 45	1152006	BEECH 90	1152912
BEECH 200	1152928	BEECH 45	1152008	BEECH 90	1152914
BEECH 23	1151202	BEECH 45	1152010	BEECH 90	1153409
BEECH 23	1151204	BEECH 45	1152012	BEECH 95	1153402
BEECH 23	1151208	BEECH 45	1152013	BEECH 95	1153404
BEECH 23	1151212	BEECH 45	1152014	BEECH 95	1153406
BEECH 23	1151214	BEECH 50	1152502	BEECH 95	1153408
BEECH 23	1151215	BEECH 50	1152504	BEECH 95	1153410
BEECH 23	1151216	BEECH 50	1152506	BEECH 99	*99
BEECH 23	1151226	BEECH 50	1152508	BEECH 99	1153802
BEECH 23	1151230	BEECH 50	1152510	BEECH 99	1154002
BEECH 23	1151240	BEECH 50	1152512	BEECH 99	1154004
BEECH 23	1151242	BEECH 50	1152514	BEECH 99	1154006
BEECH 23	1151250	BEECH 50	1152516	BELL 204	1181402
BEECH 23	1151252	BEECH 50	1152518	BELL 204	1181404
BEECH 23	1151253	BEECH 50	1152520	BELL 204	1181405
BEECH 23	1151254	BEECH 50	1152522	BELL 204	1181406
BEECH 33	1151402	BEECH 50	1152524	BELL 204	1181408
BEECH 33	1151404	BEECH 50	1152526	BELL 204	1181409
BEECH 33	1151406	BEECH 50	1152528	BELL 204	1181410
BEECH 33	1151408	BEECH 50	1152530	BELL 204	1181411
BEECH 33	1151410	BEECH 50	1152532	BELL 205	1181413
BEECH 33	1151414	BEECH 50	1152534	BELL 205	1181414
BEECH 33	1151418	BEECH 50	1152536	BELL 205	1181416
BEECH 33	1151422	BEECH 55	*55	BELL 206	1181502
BEECH 33	1151423	BEECH 55	1152702	BELL 206	1181503
BEECH 33	1151424	BEECH 55	1152704	BELL 206	1181504
BEECH 33	1151425	BEECH 55	1152706	BELL 206	1181506
BEECH 33	1151432	BEECH 55	1152708	BELL 206	1181508
BEECH 33	1151434	BEECH 55	1152728	BELL 206	1181510
BEECH 33	1151435	BEECH 55	1152729	BELL 206	1181511
BEECH 35	1151502	BEECH 55	1152730	BELL 206	1181512
BEECH 35	1151504	BEECH 55	1152732	BELL 206	1181522
BEECH 35	1151506	BEECH 56	1152736	BELL 206	1181579
BEECH 35	1151508	BEECH 56	1152738	BELL 206	1182107
BEECH 35	1151510	BEECH 58	*58	BELL 206	1182108
BEECH 35	1151512	BEECH 58	1152740	BELL 212	1181420
BEECH 35	1151514	BEECH 58	1152744	BELL 222	1182122
BEECH 35	1151516	BEECH 58	1152746	BELL 412	1182202
BEECH 35	1151518	BEECH 60	1153602	BELL 47	1180602
BEECH 35	1151520	BEECH 60	1153604	BELL 47	1180603
BEECH 35	1151522	BEECH 60	1153605	BELL 47	1180604
BEECH 35	1151524	BEECH 65	*65	BELL 47	1180606
BEECH 35	1151526	BEECH 65	1152802	BELL 47	1180702
BEECH 35	1151528	BEECH 65	1152803	BELL 47	1180704
BEECH 35	1151530	BEECH 65	1152804	BELL 47	1180802
BEECH 35	1151532	BEECH 65	1152805	BELL 47	1180804
BEECH 35	1151538	BEECH 77	1153007	BELL 47	1180806
BEECH 35	1151540	BEECH 80	*80	BELL 47	1180808
BEECH 35	1151544	BEECH 80	1152806	BELL 47	1180809
BEECH 35	1151546	BEECH 80	1152807	BELL 47	1180810
BEECH 35	1151548	BEECH 80	1152808	BELL 47	1180811

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BELL 47	1180812	BELL 47	1181066	BLANCA7	1220460
BELL 47	1180813	BELL 47	1181067	BLANCA7	1220501
BELL 47	1180814	BELL 47	1181068	BLANCA7	1220601
BELL 47	1180816	BELL 47	1181069	BLANCA7	1220701
BELL 47	1180820	BELL 47	1181070	BLANCA7	2110102
BELL 47	1180822	BELL 47	1181071	BLANCA7	2110104
BELL 47	1180843	BELL 47	1181073	BLANCA7	2110106
BELL 47	1180844	BELL 47	1181102	BLANCA7	2110108
BELL 47	1180845	BELL 47	1181103	BLANCA7	2110110
BELL 47	1180846	BELL 47	1181104	BLANCA7	2110112
BELL 47	118084C	BELL 47	1181106	BLANCA7	2110114
BELL 47	118084E	BELL 47	1181202	BLANCA7	2110116
BELL 47	118084F	BELL 47	1181310	BLANCA7	2110118
BELL 47	118084G	BELL 47	1181403	BLANCA7	2110120
BELL 47	118084H	BELL 47	1181585	BLANCA7	2110122
BELL 47	118084K	BELL 47	2390101	BLANCA7	2110124
BELL 47	118084M	BELL 47	2390301	BLANCA7	2110126
BELL 47	118084P	BELL 47	8930102	BLANCA7	2110128
BELL 47	118084R	BELL 47	8930103	BLANCA7	2110130
BELL 47	118084V	BELL 47	8930105	BLANCA7	2110132
BELL 47	1180902	BLANCA11	0191102	BLANCA7	2110133
BELL 47	1180904	BLANCA11	0191104	BLANCA7	2110134
BELL 47	1181001	BLANCA11	0191106	BLANCA7	2110136
BELL 47	1181002	BLANCA11	0191108	BLANCA7	2110138
BELL 47	1181003	BLANCA11	0191110	BLANCA7	2110140
BELL 47	1181004	BLANCA11	0191112	BLANCA7	2110142
BELL 47	1181005	BLANCA11	9140404	BLANCA7	2110144
BELL 47	1181006	BLANCA11	9140408	BLANCA7	2110146
BELL 47	1181007	BLANCA1413	1201002	BLANCA7	2110148
BELL 47	1181008	BLANCA1413	1201004	BLANCA7	2110150
BELL 47	1181009	BLANCA1413	1201006	BLANCA7	2110152
BELL 47	118100V	BLANCA1413	1201008	BLANCA7	2110154
BELL 47	1181010	BLANCA1419	1220402	BLANCA7	2110156
BELL 47	1181011	BLANCA1419	1220404	BLANCA7	2110158
BELL 47	1181012	BLANCA1419	1220406	BLANCA7	2110160
BELL 47	1181013	BLANCA1419	1220408	BLANCA7	2110162
BELL 47	1181014	BLANCA1419	3080102	BLANCA7	2110164
BELL 47	1181016	BLANCA1419	3080104	BLANCA7	2110166
BELL 47	1181018	BLANCA1419	3080106	BLANCA7	2110168
BELL 47	1181020	BLANCA1419	3080108	BLANCA7	2110170
BELL 47	1181022	BLANCA1419	3080112	BLANCA7	2110172
BELL 47	1181023	BLANCA1419	3080114	BLANCA7	2110174
BELL 47	1181024	BLANCA1419	3080116	BLANCA7	2110176
BELL 47	1181025	BLANCA1419	3080118	BLANCA7	21101M2
BELL 47	1181026	BLANCA1419	3080122	BLANCA7	21101M6
BELL 47	1181027	BLANCA1419	3080124	BLANCA7	21101MA
BELL 47	1181028	BLANCA1419	3080126	BLANCA7	21101MF
BELL 47	1181029	BLANCA1419	3080128	BLANCA7	21101ML
BELL 47	1181030	BLANCA1419	4580802	BLANCA7	21101MR
BELL 47	1181031	BLANCA1419	4580804	BLANCA7	21101MW
BELL 47	1181032	BLANCA1419	4580806	BLANCA7	21101N2
BELL 47	1181033	BLANCA1419	4580808	BLANCA7	21101N7
BELL 47	1181034	BLANCA17	1220432	BLANCA7	21101N8
BELL 47	118103M	BLANCA17	1220433	BLANCA7	21101NB
BELL 47	118103Z	BLANCA17	1220434	BLANCA7	21101NG
BELL 47	1181060	BLANCA17	1220435	BLANCA7	21101NM
BELL 47	1181061	BLANCA17	1220436	BLANCA7	21101NN
BELL 47	1181062	BLANCA17	1220437	BLANCA7	21101NS
BELL 47	1181063	BLANCA17	1220940	BLANCA7	21101NX
BELL 47	1181064	BLANCA7	0190107	BLANCA7	21101P3
BELL 47	1181065	BLANCA7	1220438	BLANCA7	21101PC

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BLANCA7	21101FH	BLANCA7	21101NG	BOEING707	1383663
BLANCA7	21101PK	BLANCA7	21101NM	BOEING707	1383668
BLANCA7	21101PN	BLANCA7	21101NN	BOEING707	1383668
BLANCA7	21101PT	BLANCA7	21101NS	BOEING707	138366C
BLANCA7	21101PY	BLANCA7	21101NX	BOEING707	138366D
BLANCA7	0190107	BLANCA7	21101P3	BOEING707	138366F
BLANCA7	1220438	BLANCA7	21101PC	BOEING707	138366H
BLANCA7	1220460	BLANCA7	21101PH	BOEING707	138366K
BLANCA7	1220501	BLANCA7	21101PK	BOEING707	138366M
BLANCA7	1220601	BLANCA7	21101PN	BOEING707	138366P
BLANCA7	1220701	BLANCA7	21101PT	BOEING707	1383677
BLANCA7	2110102	BLANCA7	21101PY	BOEING707	138367A
BLANCA7	2110104	BLANCA8	1220801	BOEING707	138367B
BLANCA7	2110106	BLANCA8	1220803	BOEING707	138367C
BLANCA7	2110108	BLANCA8	2110612	BOEING707	138367D
BLANCA7	2110110	BNORM BN2	*BN2	BOEING707	138367E
BLANCA7	2110112	BNORM BN2	1520202	BOEING707	138367F
BLANCA7	2110114	BNORM BN2	1520204	BOEING707	138367G
BLANCA7	2110116	BNORM BN2	1520206	BOEING707	138367H
BLANCA7	2110118	BNORM BN2	1520207	BOEING707	138367J
BLANCA7	2110120	BNORM BN2	1520209	BOEING707	138367K
BLANCA7	2110122	BNORM BN2	1520210	BOEING707	138367L
BLANCA7	2110124	BNORM BN2	1520215	BOEING707	138367M
BLANCA7	2110126	BNORM BN2	1520220	BOEING707	138367N
BLANCA7	2110128	BNORM BN2	1520221	BOEING707	138367P
BLANCA7	2110130	BNORM BN2	1520226	BOEING707	138367Q
BLANCA7	2110132	BNORM BN2	1520227	BOEING707	138367R
BLANCA7	2110133	BNORM BN2	1520302	BOEING707	138367S
BLANCA7	2110134	BNORM BN2	1520350	BOEING707	138367T
BLANCA7	2110136	BNORM BN2	7080221	BOEING707	138367U
BLANCA7	2110138	BNORM BN2	7080227	BOEING707	138367V
BLANCA7	2110140	BOEING707	*707	BOEING707	138367W
BLANCA7	2110142	BOEING707	1383601	BOEING707	138367X
BLANCA7	2110144	BOEING707	1383602	BOEING707	138367Y
BLANCA7	2110146	BOEING707	1383604	BOEING707	138368B
BLANCA7	2110148	BOEING707	1383605	BOEING707	138368D
BLANCA7	2110150	BOEING707	1383606	BOEING707	138368F
BLANCA7	2110152	BOEING707	1383608	BOEING707	138368H
BLANCA7	2110154	BOEING707	1383609	BOEING707	138368K
BLANCA7	2110156	BOEING707	138360C	BOEING707	138368M
BLANCA7	2110158	BOEING707	138360F	BOEING707	138369R
BLANCA7	2110160	BOEING707	138360H	BOEING707	1383701
BLANCA7	2110162	BOEING707	138360K	BOEING707	1383706
BLANCA7	2110164	BOEING707	138360N	BOEING720	*720
BLANCA7	2110166	BOEING707	138360P	BOEING720	1383802
BLANCA7	2110168	BOEING707	138360R	BOEING720	1383804
BLANCA7	2110170	BOEING707	138360T	BOEING720	1383810
BLANCA7	2110172	BOEING707	138360V	BOEING720	1383814
BLANCA7	2110174	BOEING707	138360X	BOEING720	1383818
BLANCA7	2110176	BOEING707	1383610	BOEING720	1383822
BLANCA7	21101M2	BOEING707	1383612	BOEING720	1383826
BLANCA7	21101M6	BOEING707	1383614	BOEING720	1383830
BLANCA7	21101MA	BOEING707	1383616	BOEING720	1383841
BLANCA7	21101MF	BOEING707	1383618	BOEING720	1383845
BLANCA7	21101ML	BOEING707	138361G	BOEING720	1383849
BLANCA7	21101MR	BOEING707	1383658	BOEING720	1383853
BLANCA7	21101MW	BOEING707	138365D	BOEING720	1383857
BLANCA7	21101N2	BOEING707	138365F	BOEING720	1383861
BLANCA7	21101N7	BOEING707	138365H	BOEING720	1383865
BLANCA7	21101N8	BOEING707	138365K	BOEING720	1383869
BLANCA7	21101NB	BOEING707	1383660	BOEING720	1383873

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BOEING720	1383877	BOEING727	138407F	BOEING737	138448P
BOEING727	*727	BOEING727	138407G	BOEING737	138448R
BOEING727	1384001	BOEING727	138407K	BOEING737	138448S
BOEING727	1384002	BOEING727	138407L	BOEING737	138448T
BOEING727	1384003	BOEING727	138407M	BOEING737	138448V
BOEING727	1384004	BOEING727	138407N	BOEING737	138448W
BOEING727	1384005	BOEING727	138407P	BOEING737	138448X
BOEING727	1384008	BOEING727	138407Q	BOEING737	138448Y
BOEING727	1384008	BOEING727	138407R	BOEING737	1384492
BOEING727	138400B	BOEING727	138407S	BOEING737	1384494
BOEING727	138400C	BOEING727	138407T	BOEING737	1384550
BOEING727	138400E	BOEING727	138407W	BOEING737	1384560
BOEING727	138400F	BOEING727	138407Z	BOEING747	*747
BOEING727	138400G	BOEING727	1384080	BOEING747	1384801
BOEING727	138400H	BOEING727	1384082	BOEING747	1384802
BOEING727	138400J	BOEING727	1384084	BOEING747	1384803
BOEING727	138400K	BOEING727	138408B	BOEING747	1384804
BOEING727	138400M	BOEING727	138408D	BOEING747	1384810
BOEING727	1384010	BOEING727	138408F	BOEING747	1384811
BOEING727	1384011	BOEING727	138408H	BOEING747	1384812
BOEING727	1384012	BOEING727	138408J	BOEING747	1384813
BOEING727	1384013	BOEING727	138408L	BOEING747	1384814
BOEING727	1384014	BOEING727	138408M	BOEING747	1384815
BOEING727	1384015	BOEING727	138408N	BOEING747	1384820
BOEING727	1384016	BOEING727	138408W	BOEING747	1384849
BOEING727	1384017	BOEING727	138408X	BOEING747	1384866
BOEING727	1384018	BOEING727	13840X2	BOEING747	1384868
BOEING727	1384019	BOEING727	13840XY	BOEING747	1384869
BOEING727	1384025	BOEING737	*737	BOEING747	1384871
BOEING727	1384027	BOEING737	1384402	BOEING747	1384872
BOEING727	1384028	BOEING737	1384404	BOEING747	1384873
BOEING727	138402C	BOEING737	1384435	BOEING747	1384874
BOEING727	1384030	BOEING737	1384438	BOEING747	1384881
BOEING727	1384032	BOEING737	1384453	BOEING747	1384882
BOEING727	1384035	BOEING737	1384454	BOEING747	1384885
BOEING727	1384036	BOEING737	1384457	BOEING747	1384886
BOEING727	1384037	BOEING737	1384458	BOEING747	1384888
BOEING727	1384041	BOEING737	1384459	BOEING747	1384890
BOEING727	1384043	BOEING737	1384460	BOEING747	1384891
BOEING727	1384044	BOEING737	1384461	BOEING747	1384892
BOEING727	138404G	BOEING737	1384466	BOEING747	1384893
BOEING727	138404V	BOEING737	1384469	BOEING747	1384894
BOEING727	138404Z	BOEING737	138446R	BOEING747	1384895
BOEING727	1384056	BOEING737	1384473	BOEING747	1384896
BOEING727	1384057	BOEING737	1384476	BOEING747	1384897
BOEING727	1384058	BOEING737	1384477	BOEING747	1384898
BOEING727	1384059	BOEING737	1384478	BOEING747	1384899
BOEING727	1384063	BOEING737	1384479	BOEING747	1384902
BOEING727	1384067	BOEING737	1384480	BOEING747	1384903
BOEING727	138406G	BOEING737	1384484	BOEING75	1380102
BOEING727	138406N	BOEING737	1384488	BOEING75	1380104
BOEING727	1384071	BOEING737	138448A	BOEING75	1380106
BOEING727	1384072	BOEING737	138448B	BOEING75	1380108
BOEING727	1384073	BOEING737	138448C	BOEING75	1380110
BOEING727	1384074	BOEING737	138448D	BOEING75	1380112
BOEING727	1384075	BOEING737	138448E	BOEING75	1380114
BOEING727	1384076	BOEING737	138448F	BOEING75	1380116
BOEING727	1384077	BOEING737	138448G	BOEING75	1380118
BOEING727	1384078	BOEING737	138448J	BOEING75	1380120
BOEING727	1384079	BOEING737	138448M	BOEING75	1380121
BOEING727	138407E	BOEING737	138448N	BOEING75	1380122

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BOEING75	1380124	CESSNA150	2071826	CESSNA182	2072716
BOEING75	1380126	CESSNA150	2071828	CESSNA182	2072718
BOEING75	1380128	CESSNA150	2071830	CESSNA182	2072722
BOEING75	1380130	CESSNA150	2071831	CESSNA182	2072724
BOEING75	1380131	CESSNA150	2071835	CESSNA182	2072726
BOEING75	1380132	CESSNA150	2071836	CESSNA182	2072728
BOEING75	1380133	CESSNA170	2072302	CESSNA182	2072730
BOEING75	1380134	CESSNA170	2072304	CESSNA182	2072731
BOEING75	1380136	CESSNA170	2072306	CESSNA182	2072732
BOEING75	1380137	CESSNA172	2072202	CESSNA182	2072734
BOEING75	1380138	CESSNA172	2072402	CESSNA182	2072735
BOEING75	1380140	CESSNA172	2072404	CESSNA182	2072736
BOEING75	1380142	CESSNA172	2072406	CESSNA182	2075802
BOEING75	1380144	CESSNA172	2072408	CESSNA182	2075806
BOEING75	1380146	CESSNA172	2072410	CESSNA182	2075814
BOEING75	1380148	CESSNA172	2072412	CESSNA182	2075816
BOEING75	1380150	CESSNA172	2072413	CESSNA185	*185
BOEING75	1380152	CESSNA172	2072414	CESSNA185	2072802
BOEING75	1380154	CESSNA172	2072416	CESSNA185	2072804
BOLKMS105	1406006	CESSNA172	2072418	CESSNA185	2072806
BOLKMS105	5626005	CESSNA172	2072420	CESSNA185	2072808
BOLKMS105	5626006	CESSNA172	2072421	CESSNA185	2072812
BRAERODH125	1500205	CESSNA172	2072424	CESSNA185	2072816
BRAERODH125	4230170	CESSNA172	2072425	CESSNA185	2072818
BRASOV	4490102	CESSNA172	2072426	CESSNA185	2072820
BRWSTRFLEET2	1461202	CESSNA172	2072428	CESSNA185	2072821
BRWSTRFLEET2	1461204	CESSNA172	2072429	CESSNA188	2073002
BRWSTRFLEET7	1461502	CESSNA172	2072430	CESSNA188	2073004
BRWSTRFLEET7	1461504	CESSNA172	2072431	CESSNA188	2073005
BRWSTRFLEET7	1461506	CESSNA172	2072432	CESSNA188	2073006
BRWSTRFLEET7	1461512	CESSNA172	2072434	CESSNA188	2073007
BRWSTRFLEET7	1461514	CESSNA172	2072436	CESSNA188	2073008
BRWSTRFLEET7	1461516	CESSNA172	2072437	CESSNA188	2073010
CAMRONMODELO	1880104	CESSNA172	2072438	CESSNA188	2073011
CAMRONMODELO	1880106	CESSNA172	2072443	CESSNA188	2073012
CAMRONMODELO	1880108	CESSNA175	2072502	CESSNA190	2072902
CAMRONMODELO	1880110	CESSNA175	2072504	CESSNA195	2073102
CAMRONMODELO	1880112	CESSNA175	2072506	CESSNA195	2073104
CAMRONMODELO	1880113	CESSNA175	2072508	CESSNA195	2073106
CAMRONMODELO	1880120	CESSNA177	2073704	CESSNA195	2073108
CAMRONMODELO	1880122	CESSNA177	2073706	CESSNA195	2073110
CAMRONMODELO	1880201	CESSNA177	2073708	CESSNA195	2073112
CAMRONMODELO	1880202	CESSNA177	2073709	CESSNA205	2073202
CAMRONMODELO	1880203	CESSNA180	2072602	CESSNA205	2073204
CAMRONMODELO	1880204	CESSNA180	2072604	CESSNA206	*206
CESSNA120	2071402	CESSNA180	2072606	CESSNA208	2073302
CESSNA140	2071602	CESSNA180	2072608	CESSNA206	2073304
CESSNA140	2071504	CESSNA180	2072610	CESSNA206	2073306
CESSNA150	*150	CESSNA180	2072612	CESSNA206	2073308
CESSNA150	2071802	CESSNA180	2072614	CESSNA206	2073309
CESSNA150	2071804	CESSNA180	2072616	CESSNA206	2073310
CESSNA150	2071806	CESSNA180	2072618	CESSNA206	2073311
CESSNA150	2071808	CESSNA180	2072622	CESSNA206	2073312
CESSNA150	2071810	CESSNA180	2072624	CESSNA206	2073313
CESSNA150	2071812	CESSNA182	2072702	CESSNA206	2073316
CESSNA150	2071814	CESSNA182	2072704	CESSNA206	2073317
CESSNA150	2071816	CESSNA182	2072706	CESSNA206	2073318
CESSNA150	2071818	CESSNA182	2072708	CESSNA206	2073319
CESSNA150	2071820	CESSNA182	2072710	CESSNA206	2073322
CESSNA150	2071822	CESSNA182	2072712	CESSNA206	2073324
CESSNA150	2071824	CESSNA182	2072714	CESSNA206	2073332

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
CESSNA206	2073333	CESSNA305	207403D	CESSNA401	207590E
CESSNA206	2073334	CESSNA305	207408K	CESSNA402	*402
CESSNA206	2073338	CESSNA310	*310	CESSNA402	207590K
CESSNA206	2073340	CESSNA310	2074202	CESSNA402	207590L
CESSNA206	2073342	CESSNA310	2074204	CESSNA402	207590M
CESSNA206	2073344	CESSNA310	2074206	CESSNA402	207590P
CESSNA206	2073346	CESSNA310	2074208	CESSNA402	207590R
CESSNA206	2073348	CESSNA310	2074210	CESSNA404	2075901
CESSNA206	2073350	CESSNA310	2074212	CESSNA411	2075902
CESSNA206	2073352	CESSNA310	2074214	CESSNA411	2075904
CESSNA206	2073353	CESSNA310	2074216	CESSNA414	*414
CESSNA206	2073356	CESSNA310	2074218	CESSNA414	2075907
CESSNA206	2073357	CESSNA310	2074220	CESSNA414	2075908
CESSNA207	*207	CESSNA310	2074222	CESSNA421	*421
CESSNA207	2073602	CESSNA310	2074224	CESSNA421	2076010
CESSNA207	2073604	CESSNA310	2074226	CESSNA421	2076012
CESSNA207	2073612	CESSNA310	2074228	CESSNA421	2076014
CESSNA207	2073614	CESSNA310	2074230	CESSNA421	2076016
CESSNA210	2073402	CESSNA310	2074234	CESSNA425	2076018
CESSNA210	2073403	CESSNA310	2074236	CESSNA500	2076602
CESSNA210	2073404	CESSNA310	2074238	CESSNA500	2076604
CESSNA210	2073406	CESSNA310	2074240	CESSNA501	2066503
CESSNA210	2073408	CESSNA310	2074242	CESSNA501	2076605
CESSNA210	2073410	CESSNA310	2074244	CESSNAT50	2071302
CESSNA210	2073412	CESSNA310	2074245	CESSNAT50	2071304
CESSNA210	2073414	CESSNA310	2074246	CESSNAT50	2071305
CESSNA210	2073416	CESSNA320	2074502	CESSNAT50	2071306
CESSNA210	2073418	CESSNA320	2074504	CESSNAT50	2071307
CESSNA210	2073422	CESSNA320	2074506	CESSNAT50	2071308
CESSNA210	2073430	CESSNA320	2074508	CESSNAUC94	2070302
CESSNA210	2073432	CESSNA320	2074510	CESSNAUC94	*2071002
CESSNA210	2073436	CESSNA320	2074512	CESSNAUC94	2071102
CESSNA210	2073438	CESSNA320	2074514	CESSNAUC94	2071104
CESSNA210	2073439	CESSNA320	2074516	CHILD S1	0110100
CESSNA210	2073440	CESSNA335	2075601	CHILD S1	0110201
CESSNA210	2073446	CESSNA336	2075602	CHILD S1	0110202
CESSNA210	2073447	CESSNA337	*337	CHILD S1	0110301
CESSNA210	2073448	CESSNA337	2075702	CHILD S1	0110303
CESSNA210	2073449	CESSNA337	2075703	CHILD S1	0110304
CESSNA210	2073450	CESSNA337	2075704	CHILD S1	011101A
CESSNA210	2073451	CESSNA337	2075706	CNDAIRCL600	1900302
CESSNA210	2073453	CESSNA337	2075707	COMWTH185	2370602
CESSNA210	2073454	CESSNA337	2075712	COMWTH185	2370604
CESSNA210	2073456	CESSNA337	2075714	COMWTH185	2370808
CESSNA303	2073820	CESSNA337	2075717	CONAERLA4	2400102
CESSNA305	2073902	CESSNA337	2075719	CONAERLA4	2400108
CESSNA305	2074001	CESSNA337	2075721	CONAERLA4	2400110
CESSNA305	2074002	CESSNA337	2075723	CONAERLA4	5110302
CESSNA305	2074003	CESSNA337	2075724	CONAERLA4	5110304
CESSNA305	2074004	CESSNA337	2075725	CONAERLA4	5110306
CESSNA305	2074005	CESSNA337	2075726	CONAERLA4	5110308
CESSNA305	2074006	CESSNA337	2075727	CONAERLA4	5110310
CESSNA305	2074008	CESSNA337	2075730	CONAERLA4	5110312
CESSNA305	2074010	CESSNA337	2075731	CONAERLA4	5110314
CESSNA305	2074012	CESSNA337	2075732	CONAERLA4	5110316
CESSNA305	2074014	CESSNA337	2075733	CONAERLA4	5110320
CESSNA305	2074016	CESSNA340	2076404	CURTISC46	*C46
CESSNA305	2074018	CESSNA340	2076405	CURTISC46	2622601
CESSNA305	2074028	CESSNA401	*401	CURTISC46	2622602
CESSNA305	2074030	CESSNA401	207590C	CURTISC46	2622604
CESSNA305	2074031	CESSNA401	207590D	CURTISC46	2622606

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
CURTISC46	2622608	CURTISTRVAIR	2621828	CVAC	BT13
CURTISC46	2622610	CURTISTRVAIR	2621830	CVAC	BT13
CURTISC46	2622624	CURTISTRVAIR	2621832	CVAC	BT13
CURTISC46	2622701	CURTISTRVAIR	2621902	CVAC	L13
CURTISC46	2622702	CURTISTRVAIR	2621904	CVAC	L13
CURTISC46	2622704	CURTISTRVAIR	2621906	CVAC	L13
CURTISC46	2622706	CURTISTRVAIR	2621908	CVAC	STC580
CURTISC46	2622708	CVAC 22	*22	CVAC	*STC580
CURTISC46	2622710	CVAC 22	2423302	CVAC	STC580
CURTISC46	2622750	CVAC 22	2423304	CVAC	STC580
CURTISJR	2620502	CVAC 22	3790104	CVAC	STC580
CURTISROBIN	2620802	CVAC 240	*240	CVAC	STC580
CURTISROBIN	2620804	CVAC 240	2422601	CVAC	STC580
CURTISROBIN	2620806	CVAC 240	2422602	DART	G
CURTISROBIN	2620808	CVAC 240	2422604	DART	G
CURTISROBIN	2620810	CVAC 240	2422606	DART	G
CURTISROBIN	2620812	CVAC 240	2422608	DART	G
CURTISROBIN	2620814	CVAC 240	2422610	DHAV	DHC1
CURTISTRVAIR	2621002	CVAC 240	2422612	DHAV	DHC1
CURTISTRVAIR	2621004	CVAC 240	2422614	DHAV	DHC1
CURTISTRVAIR	2621006	CVAC 240	2422616	DHAV	DHC1
CURTISTRVAIR	2621008	CVAC 240	2422618	DHAV	DHC1
CURTISTRVAIR	2621010	CVAC 240	2422620	DHAV	DHC1
CURTISTRVAIR	2621012	CVAC 240	2422622	DHAV	DHC1
CURTISTRVAIR	2621102	CVAC 240	2422624	DHAV	DHC1
CURTISTRVAIR	2621104	CVAC 240	2422626	DHAV	DHC2
CURTISTRVAIR	2621106	CVAC 240	2422628	DHAV	DHC2
CURTISTRVAIR	2621108	CVAC 240	2422630	DHAV	DHC2
CURTISTRVAIR	2621202	CVAC 240	2422632	DHAV	DHC2
CURTISTRVAIR	2621204	CVAC 240	2422633	DHAV	DHC2
CURTISTRVAIR	2621302	CVAC 240	2422634	DHAV	DHC2
CURTISTRVAIR	2621304	CVAC 240	2422636	DHAV	DHC2
CURTISTRVAIR	2621306	CVAC 240	2422638	DHAV	DHC2
CURTISTRVAIR	2621308	CVAC 240	2422640	DHAV	DHC2
CURTISTRVAIR	2621402	CVAC 240	2422642	DHAV	DHC2
CURTISTRVAIR	2621404	CVAC 240	2422643	DHAV	DHC2
CURTISTRVAIR	2621406	CVAC 240	2422644	DHAV	DHC2
CURTISTRVAIR	2621408	CVAC 240	2422645	DHAV	DHC3
CURTISTRVAIR	2621502	CVAC 240	2422646	DHAV	DHC3
CURTISTRVAIR	2621504	CVAC 240	2422647	DHAV	DHC6
CURTISTRVAIR	2621506	CVAC 240	2422648	DHAV	DHC6
CURTISTRVAIR	2621508	CVAC 240	242264A	DHAVXXDH82	2801002
CURTISTRVAIR	2621602	CVAC 340	*340	DHAVXXDH82	2801006
CURTISTRVAIR	2621604	CVAC 340	2422702	DHAVXXDH82	2801020
CURTISTRVAIR	2621606	CVAC 340	2422704	DOUG A26	3020502
CURTISTRVAIR	2621608	CVAC 340	2422706	DOUG A26	3020504
CURTISTRVAIR	2621702	CVAC 340	2422708	DOUG A26	3020506
CURTISTRVAIR	2621704	CVAC 340	242270A	DOUG A26	3020510
CURTISTRVAIR	2621802	CVAC 340	242270H	DOUG A26	3020512
CURTISTRVAIR	2621804	CVAC 340	2422712	DOUG A26	3020516
CURTISTRVAIR	2621806	CVAC 340	2422714	DOUG A26	3020518
CURTISTRVAIR	2621808	CVAC 340	2422716	DOUG A26	3020524
CURTISTRVAIR	2621810	CVAC 340	2422718	DOUG A26	3020525
CURTISTRVAIR	2621812	CVAC 340	2422742	DOUG A26	3020526
CURTISTRVAIR	2621814	CVAC BT13	2420202	DOUG A26	*DC10
CURTISTRVAIR	2621816	CVAC BT13	2420204	DOUG DC10	*DC10
CURTISTRVAIR	2621818	CVAC BT13	2420206	DOUG DC10	3022110
CURTISTRVAIR	2621820	CVAC BT13	2420208	DOUG DC10	3022111
CURTISTRVAIR	2621822	CVAC BT13	2420210	DOUG DC10	3022114
CURTISTRVAIR	2621824	CVAC BT13	2420222	DOUG DC10	3022118
CURTISTRVAIR	2621826	CVAC BT13	2420224	DOUG DC10	3023001

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
DOUG DC10	3023501	DOUG DC3	302146Z	DOUG DC8	302191D
DOUG DC10	3023503	DOUG DC3	3021470	DOUG DC8	302191F
DOUG DC10	3023508	DOUG DC3	3021471	DOUG DC8	302191H
DOUG DC3	*DC3	DOUG DC3	3021472	DOUG DC8	302191K
DOUG DC3	3021401	DOUG DC3	3021473	DOUG DC8	3021920
DOUG DC3	3021402	DOUG DC3	3021474	DOUG DC8	3021922
DOUG DC3	3021404	DOUG DC3	3021476	DOUG DC8	3021924
DOUG DC3	3021406	DOUG DC3	3021478	DOUG DC8	3021925
DOUG DC3	3021410	DOUG DC3	302147M	DOUG DC8	3021926
DOUG DC3	3021412	DOUG DC3	3021480	DOUG DC8	3021927
DOUG DC3	3021414	DOUG DC4	*DC4	DOUG DC8	3021928
DOUG DC3	3021416	DOUG DC4	3021502	DOUG DC8	302192B
DOUG DC3	3021418	DOUG DC4	3021504	DOUG DC8	302192D
DOUG DC3	3021420	DOUG DC4	3021506	DOUG DC8	302192F
DOUG DC3	3021422	DOUG DC4	3021508	DOUG DC8	302192H
DOUG DC3	3021424	DOUG DC4	3021510	DOUG DC8	302192K
DOUG DC3	3021425	DOUG DC4	3021512	DOUG DC8	302192M
DOUG DC3	3021426	DOUG DC4	3021514	DOUG DC8	3021952
DOUG DC3	3021427	DOUG DC4	3021516	DOUG DC8	3021953
DOUG DC3	3021428	DOUG DC4	3021518	DOUG DC8	3021954
DOUG DC3	3021429	DOUG DC4	3021520	DOUG DC8	302195B
DOUG DC3	3021430	DOUG DC4	3021522	DOUG DC8	3021950
DOUG DC3	3021431	DOUG DC4	3021524	DOUG DC8	3021965
DOUG DC3	3021432	DOUG DC4	3021526	DOUG DC8	3021970
DOUG DC3	3021433	DOUG DC4	3021528	DOUG DC8	3021972
DOUG DC3	3021434	DOUG DC4	3021530	DOUG DC8	302197B
DOUG DC3	3021436	DOUG DC4	3021532	DOUG DC8	302197D
DOUG DC3	3021438	DOUG DC4	3021534	DOUG DC8	302198A
DOUG DC3	3021439	DOUG DC4	3021536	DOUG DC8	302198B
DOUG DC3	3021440	DOUG DC4	3021537	DOUG DC8	302198F
DOUG DC3	3021441	DOUG DC4	3021538	DOUG DC8	302198H
DOUG DC3	3021442	DOUG DC6	*DC6	DOUG DC9	*DC9
DOUG DC3	3021443	DOUG DC6	3021702	DOUG DC9	3022002
DOUG DC3	3021444	DOUG DC6	3021706	DOUG DC9	3022026
DOUG DC3	3021445	DOUG DC6	3021708	DOUG DC9	3022028
DOUG DC3	3021446	DOUG DC6	3021710	DOUG DC9	3022028
DOUG DC3	3021447	DOUG DC6	3021712	DOUG DC9	3022030
DOUG DC3	3021448	DOUG DC6	3021714	DOUG DC9	3022034
DOUG DC3	3021449	DOUG DC7	*DC7	DOUG DC9	3022036
DOUG DC3	3021450	DOUG DC7	3021802	DOUG DC9	3022037
DOUG DC3	3021451	DOUG DC7	3021804	DOUG DC9	3022038
DOUG DC3	3021452	DOUG DC7	3021805	DOUG DC9	302203D
DOUG DC3	3021453	DOUG DC7	3021806	DOUG DC9	302203F
DOUG DC3	3021454	DOUG DC7	3021807	DOUG DC9	302203H
DOUG DC3	3021455	DOUG DC7	3021808	DOUG DC9	302203K
DOUG DC3	3021456	DOUG DC8	*DC8	DOUG DC9	3022051
DOUG DC3	3021457	DOUG DC8	3021901	DOUG DC9	302205A
DOUG DC3	3021458	DOUG DC8	3021902	DOUG DC9	302205C
DOUG DC3	3021459	DOUG DC8	3021904	DOUG DC9	3022065
DOUG DC3	3021460	DOUG DC8	3021906	DOUG DC9	3022066
DOUG DC3	3021461	DOUG DC8	3021908	DOUG DC9	3022067
DOUG DC3	3021462	DOUG DC8	302190B	DOUG DC9	302206A
DOUG DC3	3021463	DOUG DC8	302190D	DOUG DC9	302206C
DOUG DC3	3021464	DOUG DC8	302190F	DOUG DC9	302206E
DOUG DC3	3021466	DOUG DC8	302190H	DOUG DC9	302207A
DOUG DC3	3021467	DOUG DC8	3021910	DOUG DC9	302207C
DOUG DC3	3021468	DOUG DC8	3021912	DOUG DC9	302207D
DOUG DC3	3021469	DOUG DC8	3021914	DOUG DC9	302207N
DOUG DC3	302146T	DOUG DC8	3021916	DOUG DC9	302207P
DOUG DC3	302146X	DOUG DC8	3021918	DOUG DC9	3022080
DOUG DC3	302146Y	DOUG DC8	302191B	DOUG DC9	3022081

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
DOUG DC9	3022082	FRCHLD24	3370512	FRCHLD24	3370620
EAGLE DW	3230203	FRCHLD24	3370514	FRCHLD24	3370622
EIRVON20	5760102	FRCHLD24	3370516	FRCHLD24	3370624
EIRVON20	5760104	FRCHLD24	3370518	FRCHLD24	3370626
EIRVON20	5760202	FRCHLD24	3370520	FRCHLD24	3370628
EIRVON20	5760204	FRCHLD24	3370602	FRCHLDC119	3372102
EIRVON20	5760206	FRCHLD24	3370604	FRCHLDC119	3372106
EIRVON20	5760207	FRCHLD24	3370606	FRCHLDC119	3372108
EMAIR MA1	3280103	FRCHLD24	3370608	FRCHLDF27	+F27
EMAIR MA1	6070102	FRCHLD24	3370610	FRCHLDF27	3373002
EMB 110	*110	FRCHLD24	3370612	FRCHLDF27	3373004
EMB 110	3260122	FRCHLD24	3370614	FRCHLDF27	3373006
EMB 110	3260124	FRCHLD24	3370616	FRCHLDF27	3373008
ENSTRMF28	3300404	FRCHLD24	3370618	FRCHLDF27	3373010
ENSTRMF28	3300405	FRCHLD24	3370620	FRCHLDF27	3373016
ENSTRMF28	3300406	FRCHLD24	3370622	FRCHLDFH1100	3376502
ENSTRMF28	3300407	FRCHLD24	3370624	FRCHLDFH1100	4350302
ENSTRMF28	3300412	FRCHLD24	3370626	FRCHLDFH1100	4351405
ENSTRMF28	3300424	FRCHLD24	3370628	FRCHLDM62	3371602
ENSTRMF28	3300502	FRCHLD24	3370202	FRCHLDM62	3371604
ENSTRMF28	3300505	FRCHLD24	3370204	FRCHLDM62	3371606
ENSTRMF28	3300550	FRCHLD24	3370206	FRCHLDM62	3371608
ENSTRMF28	3300404	FRCHLD24	3370208	FRCHLDM62	3371609
ENSTRMF28	3300405	FRCHLD24	3370210	FRCHLDM62	3371610
ENSTRMF28	3300406	FRCHLD24	3370212	FRCHLDM62	3371612
ENSTRMF28	3300407	FRCHLD24	3370214	FRCHLDM62	3371614
ENSTRMF28	3300412	FRCHLD24	3370216	FRCHLDM62	3371616
ENSTRMF28	3300424	FRCHLD24	3370218	FRCHLDM62	3371818
ENSTRMF28	3300502	FRCHLD24	3370220	FRCHLDM62	3371620
ENSTRMF28	3300505	FRCHLD24	3370222	FRCHLDM62	3371622
ENSTRMF28	3300550	FRCHLD24	3370224	FRCHLDM62	3371624
FLEET 16B	3480502	FRCHLD24	3370302	FRCHLDM62	3371626
FLEET 16B	3480504	FRCHLD24	3370304	FRCHLDM62	3371628
FRCHLD24	3370202	FRCHLD24	3370402	FRCHLDM62	3371630
FRCHLD24	3370204	FRCHLD24	3370404	FRCHLDM62	3371632
FRCHLD24	3370206	FRCHLD24	3370406	FRCHLDM62	3371634
FRCHLD24	3370208	FRCHLD24	3370408	FRCHLDM62	3371636
FRCHLD24	3370210	FRCHLD24	3370410	FRCHLDM62	3371638
FRCHLD24	3370212	FRCHLD24	3370412	FRCHLDM62	3371640
FRCHLD24	3370214	FRCHLD24	3370414	FRCHLDM62	3371642
FRCHLD24	3370216	FRCHLD24	3370416	FRCHLDM62	3374004
FRCHLD24	3370218	FRCHLD24	3370418	FRCHLDM62	3374006
FRCHLD24	3370220	FRCHLD24	3370502	GENBALAX6	3760102
FRCHLD24	3370222	FRCHLD24	3370504	GENBALAX6	3760202
FRCHLD24	3370224	FRCHLD24	3370506	GLASFL201	3800344
FRCHLD24	3370302	FRCHLD24	3370508	GLASFLH301	3800335
FRCHLD24	3370304	FRCHLD24	3370510	GLASFLH301	3800337
FRCHLD24	3370402	FRCHLD24	3370512	GLASFLH301	3800339
FRCHLD24	3370404	FRCHLD24	3370514	GLASFLH301	3800341
FRCHLD24	3370406	FRCHLD24	3370516	GROB 103CAT	1660202
FRCHLD24	3370408	FRCHLD24	3370518	GROB ASTIR	1660104
FRCHLD24	3370410	FRCHLD24	3370520	GRTLKS2T1	3910101
FRCHLD24	3370412	FRCHLD24	3370602	GRTLKS2T1	3910102
FRCHLD24	3370414	FRCHLD24	3370604	GRTLKS2T1	3910104
FRCHLD24	3370416	FRCHLD24	3370606	GRTLKS2T1	3910106
FRCHLD24	3370418	FRCHLD24	3370608	GRTLKS2T1	3910108
FRCHLD24	3370502	FRCHLD24	3370610	GRUMANG21	3951202
FRCHLD24	3370504	FRCHLD24	3370612	GRUMANG21	3951204
FRCHLD24	3370506	FRCHLD24	3370614	GRUMANG21	3951205
FRCHLD24	3370508	FRCHLD24	3370616	GRUMANTBM	3950308
FRCHLD24	3370510	FRCHLD24	3370618	GRUMANTBM	3950308

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
GRUMANTBM	3950310	GULSTMMA1	0630610	HUGHES269	4470402
GRUMAVAA1	0630820	GULSTMMA1	0630710	HUGHES269	4470403
GRUMAVAA1	0631202	GULSTMMA1	0631206	HUGHES269	4470404
GRUMAVAA1	0632001	GULSTMMA1	0631214	HUGHES269	4470406
GRUMAVAA1	3960100	GULSTMMA5	0631410	HUGHES269	4470502
GRUMAVAA1	3960101	GULSTMMA5	3960105	HUGHES269	4470504
GRUMAVAA1	3960102	GULSTMMA5	3960106	HUGHES369	4470702
GRUMAVAA1	3960103	GULSTMMA5	3960107	HUGHES369	4470704
GRUMAVAA1	3960502	GULSTMMA5	3960124	HUGHES369	4470706
GRUMAVAA5	0632005	GULSTMG1159	*G1159	HUGHES369	4470718
GRUMAVAA5	3960104	GULSTMG1159	3953505	HUGHES369	4470720
GRUIMAVG1159	3960302	GULSTMG1159	3953535	HUGHES369	4470722
GRUIMAVG164	3952801	GULSTMG1159	3970109	HUGHES369	4470728
GRUIMAVG164	3960201	GULSTMG159	3952202	HUGHES389	4470730
GRUIMAVG164	3960202	GULSTMG44	*G44	HUGHES369	4470802
GRUIMAVG164	3960203	GULSTMG44	3951502	HUGHES369	4470806
GRUIMAVG164	3960204	GULSTMG44	3951504	HUGHES55	4471004
GRUIMAVG164	3979904	GULSTMG44	3951506	HWKSLYDH104	*DH104
GRUIMAVG164	8052214	GULSTMG44	3951508	HWKSLYDH104	2800402
GULSTM112	0144701	GULSTMGA7	3960401	HWKSLYDH104	2800404
GULSTM112	7630302	HELIO H295	4300802	HWKSLYDH104	2800406
GULSTM112	7630303	HELIO H295	4300803	HWKSLYDH104	2800408
GULSTM112	7630306	HELIO H295	4301101	HWKSLYDH104	2800410
GULSTM112	7630307	HELIO H295	4301102	HWKSLYDH104	2800412
GULSTM112	7630314	HELIO H295	4301104	HWKSLYDH104	2800414
GULSTM112	7630315	HELIO H391	4300102	HWKSLYDH104	2800416
GULSTM112	7630318	HELIO H391	4300104	HWKSLYDH104	2800417
GULSTM500	0141102	HELIO H391	4300106	HWKSLYDH104	2800418
GULSTM500	0141104	HELIO H395	4300202	HWKSLYDH104	2800420
GULSTM500	0141106	HELIO H395	4300204	HWKSLYDH125	*DH125
GULSTM500	0141107	HELIO H395	4300206	HWKSLYDH125	1500204
GULSTM500	0141108	HILLERUH12	4360102	HWKSLYDH125	4210101
GULSTM520	0141202	HILLERUH12	4360103	HWKSLYDH125	4210112
GULSTM580	0141402	HILLERUH12	4360104	HWKSLYDH125	4230102
GULSTM580	0141404	HILLERUH12	4360105	HWKSLYDH125	4230106
GULSTM580	0141406	HILLERUH12	4360106	HWKSLYDH125	4230110
GULSTM680	*680	HILLERUH12	4360107	HWKSLYDH125	4230112
GULSTM680	0141408	HILLERUH12	4360108	HWKSLYDH125	4230126
GULSTM680	0141802	HILLERUH12	4360109	HWKSLYDH125	4230130
GULSTM680	0141804	HILLERUH12	4350110	HWKSLYDH125	4230134
GULSTM680	0141806	HILLERUH12	4360111	HWKSLYDH125	4230138
GULSTM680	0141808	HILLERUH12	4360112	HWKSLYDH125	423013M
GULSTM680	0141810	HILLERUH12	4360113	HWKSLYDH125	423013P
GULSTM680	0141811	HILLERUH12	4360114	HWKSLYDH125	4230140
GULSTM680	0141812	HILLERUH12	4360115	HWKSLYDH125	4230158
GULSTM680	0141802	HILLERUH12	4360116	HWKSLYDH125	4230160
GULSTM680	7830513	HILLERUH12	4360117	HYNES B2	1440502
GULSTM680TP	0141712	HILLERUH12	4360118	HYNES B2	1440504
GULSTM680TP	0141714	HILLERUH12	4360119	HYNES B2	1440506
GULSTM680TP	0141716	HILLERUH12	4360120	HYNES B2	1440508
GULSTM680TP	0141718	HILLERUH12	4360121	INTRCP200	5650302
GULSTM680TC	3970404	HILLERUH12	4360122	INTRCP200	5650304
GULSTM690TP	0141720	HILLERUH12	4360124	INTRCP200	5650306
GULSTM690TP	0141722	HILLERUH12	4360125	INTRCP200	5650308
GULSTM690TP	3970410	HILLERUH12	4360126	INTRCP200	5650310
GULSTM690TP	3970411	HILLERUH12	4360127	ISRAEL1121	0142002
GULSTM690TP	7630515	HILLERUH12	4360128	ISRAEL1121	0142006
GULSTM690TP	7630516	HILLERUH12	4360129	ISRAEL1121	0142010
GULSTM690TP	7630517	HILLERUH12	4360130	ISRAEL1123	*1123
GULSTM690TP	7630518	HILLERUH12	4360135	ISRAEL1123	4500101
GULSTM690TP	7630519	HILLERUH12	4360809	ISRAEL1124	*1124
				ISRAEL1124	4500102
				ISRAEL1124	4500103

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
JBMSTRDGA15	4690502	LKHEED18	5261624	MEYERSOTW	5650208
JBMSTRDGA15	4690504	LKHEED18	5261632	MNCOUP90	5810102
JBMSTRDGA15	4690506	LKHEED18	5261634	MNCOUP90	5810104
JBMSTRDGA15	4690508	LKHEED18	5261636	MNCOUP90	5810107
JBMSTRDGA15	4690510	LKHEED18	5261638	MNCOUP90	5810108
JBMSTRDGA15	4690512	LKHEED18	5261640	MNCOUP90	5810110
JBMSTRDGA15	4690514	LKHEED18	5261642	MNCOUP90	5810130
JBMSTRDGA15	4690516	LKHEEDPV1	5260102	MNNITEM18	5870101
JBMSTRDGA15	4690518	LKHEEDPV1	5260106	MNNITEM18	5870102
LAIKFN10	5090204	LKHEEDT33	5260401	MNNITEM18	5870104
LAIKFN10	5090206	LKHEEDT33	5260402	MNNITEM18	5870106
LAIKFN10	5090208	LKHEEDT33	5260404	MNNITEM18	5870108
LEAR 23	*23	LKHEEDT33	5260406	MOONEYM20	5870202
LEAR 23	5170102	LUSCOM8	8190102	MOONEYM20	5870204
LEAR 24	*24	LUSCOM8	8190104	MOONEYM20	5870206
LEAR 24	5170302	LUSCOM8	8190106	MOONEYM20	5870208
LEAR 24	5170304	LUSCOM8	8190108	MOONEYM20	5870210
LEAR 24	5170306	LUSCOM8	8190110	MOONEYM20	5870212
LEAR 24	5170307	LUSCOM8	8190112	MOONEYM20	5870214
LEAR 24	5170309	LUSCOM8	8190114	MOONEYM20	5870219
LEAR 24	5170310	LUSCOM8	8190116	MOONEYM20	5870220
LEAR 24	5170311	LUSCOM8	8190118	MOONEYM20	5870302
LEAR 25	*25	LUSCOM8	8190120	MOONEYM20	5870304
LEAR 25	5170506	LUSCOM8	8190122	MOONEYM20	5870306
LEAR 25	5170509	LUSCOM8	8190124	MOONEYM20	5870308
LEAR 25	5170511	LUSCOM8	8190126	MOONEYM20	5870310
LEAR 25	5170513	LUSCOM8	8190128	MOONEYM20	5870312
LEAR 25	5170514	LUSCOM8	8190130	MOONEYM20	5870314
LEAR 35	*35	LUSCOM8	8190132	MOONEYM20	5870316
LEAR 35	5170600	LUSCOM8	8190154	MOONEYM20	5870601
LEAR 35	5170601	LUSCOM8	819019E	MOONEYM20	5870605
LEAR 35	5170602	MARTIN404	*404	MRCHTIS205	8120412
LEAR 55	5170702	MARTIN404	5450702	MTSBSIMU2	5780404
LET L13	1360306	MAULE M4	5460102	MTSBSIMU2	5780405
LKHEED12A	5261402	MAULE M4	5460104	MTSBSIMU2	5780406
LKHEED12A	5261404	MAULE M4	5460105	MTSBSIMU2	5780407
LKHEED12A	5261406	MAULE M4	5460106	MTSBSIMU2	5780408
LKHEED12A	5261408	MAULE M4	5460108	MTSBSIMU2	5780409
LKHEED12A	5261410	MAULE M4	5460112	MTSBSIMU2	5780410
LKHEED1329	*1329	MAULE M4	5460114	MTSBSIMU2	5780411
LKHEED1329	5263102	MAULE M4	5460116	MTSBSIMU2	5780412
LKHEED1329	5263104	MAULE M4	5460128	MTSBSIMU2	5780413
LKHEED1329	5263108	MAULE M4	5460130	MTSBSIMU2	5780414
LKHEED1329	5263108	MAULE M4	5460132	MTSBSIMU300	5780602
LKHEED1329	5263110	MAULE M5	5460133	MULTECD16	9230602
LKHEED1329	5263118	MAULE M5	5460134	MULTECD16	9230604
LKHEED1329	5263119	MAULE M5	5460135	MULTECD16	9230606
LKHEED1329	5263125	MAULE M5	5460204	MULTECD16	9230608
LKHEED18	5261802	MAULE M6	5460180	MULTECD16	9230610
LKHEED18	5261803	MCCULHJ2	5500604	MULTECD16	9230612
LKHEED18	5261804	MCLISHFUNKB	5480102	NAMER B25	6400702
LKHEED18	5261806	MCLISHFUNKB	5480104	NAMER B25	6400704
LKHEED18	5261808	MCLISHFUNKB	5480106	NAMER B25	6400705
LKHEED18	5261810	MCLISHFUNKB	5480108	NAMER B25	6400706
LKHEED18	5261812	MCLISHFUNKB	5480202	NAMER B25	6400708
LKHEED18	5261814	MCLISHFUNKB	5480204	NAMER B25	6400710
LKHEED18	5261816	MCLISHFUNKB	5480206	NAMER B25	6400712
LKHEED18	5261818	MCLISHFUNKB	5480208	NAMER B25	6400713
LKHEED18	5261820	MEYERSOTW	5650202	NAMER B25	6400714
LKHEED18	5261822	MEYERSOTW	5650204	NAMER B25	6400718
		MEYERSOTW	5650206	NAMER B25	6400719

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
NAMER F51	6402301	NAVIONNAVION	6150144	PIPER J3	7100521
NAMER F51	6402302	NAVIONNAVION	6150146	PIPER J3	7100522
NAMER F51	6402303	NAVIONNAVION	6150148	PIPER J3	7100524
NAMER F51	6402304	NAVIONNAVION	6150160	PIPER J3	7100525
NAMER F51	6402305	NAVIONNAVION	6150162	PIPER J3	7100526
NAMER F51	6402306	NAVIONNAVION	6150164	PIPER J3	7100527
NAMER F51	6402307	NAVIONNAVION	6150166	PIPER J3	7100528
NAMER F51	6402308	NAVIONNAVION	6150168	PIPER J3	710052P
NAMER F51	6402309	NAVIONNAVION	6150170	PIPER J3	710052Q
NAMER F51	6402310	NAVIONNAVION	6150172	PIPER J3	710052S
NAMER F51	6402314	NAVIONNAVION	6150174	PIPER J3	710052T
NAMER NA260	6402502	NAVIONNAVION	6150176	PIPER J3	7100530
NAMER NA260	6402504	NAVIONNAVION	6150178	PIPER J3	7100532
NAMER NA260	6402505	NORD SV4	6383006	PIPER J3	7100534
NAMER NA260	6402506	NORD SV4	8470102	PIPER J3	7100536
NAMER NA260	6402512	NORWST65	6480116	PIPER J3	7100538
NAMER T6	1922828	NORWST65	6480118	PIPER J3	7100540
NAMER T6	6400402	NORWST65	6480120	PIPER J3	7100541
NAMER T6	6400404	NORWST65	6480122	PIPER J3	7100542
NAMER T6	6400405	NORWST65	6480124	PIPER J3	7100544
NAMER T6	6400406	ORLHELH19	8141608	PIPER J3	7100546
NAMER T6	6400407	ORLHELH19	8141609	PIPER J3	7100548
NAMER T6	6400408	ORLHELH19	8141610	PIPER J3	7100550
NAMER T6	6400410	ORLHELH19	8141612	PIPER J3	7100552
NAMER T6	6400412	ORLHELH19	8141614	PIPER J3	7101102
NAMER T6	6400414	ORLHELH19	8141616	PIPER J3	7101104
NAMER T6	6400415	ORLHELH19	8141618	PIPER J4	7100602
NAMER T6	6400416	PICARDAX6	05804UH	PIPER J4	7100604
NAMER T6	6400417	PICARDAX6	7001218	PIPER J4	7100605
NAMER T6	6400418	PILATS84	7090103	PIPER J4	7100606
NAMER T6	6400419	PILATS84	7090104	PIPER J4	7100608
NAMER T6	6400420	PIPER 600	*600	PIPER J4	7100610
NAMER T6	6400422	PIPER 600	7106001	PIPER J4	7100612
NAMER T6	6400423	PIPER 600	7106002	PIPER J4	7100614
NAMER T6	6400424	PIPER 600	7106010	PIPER J5	7100202
NAMER T6	6400426	PIPER 600	7106011	PIPER J5	7100204
NAMER T6	6400430	PIPER 600	7106012	PIPER J5	7100702
NAMER T6	6400431	PIPER 600	7106015	PIPER J5	7100704
NAMER T6	6400432	PIPER 600	8380604	PIPER J5	7100706
NAMER T6	6400434	PIPER 600	8380605	PIPER J5	7100708
NAMER T6	6400436	PIPER 600	8380607	PIPER J5	7100710
NAMER T6	6400441	PIPER 600	8380608	PIPER J5	7100712
NAMER T6	6400442	PIPER E2	7100302	PIPER PA12	7101202
NAVAL N3N	6120202	PIPER J2	7100402	PIPER PA12	7101204
NAVIONNAVION	6150104	PIPER J2	7100412	PIPER PA14	7101402
NAVIONNAVION	6150106	PIPER J3	7100501	PIPER PA15	7101502
NAVIONNAVION	6150108	PIPER J3	7100502	PIPER PA16	7101602
NAVIONNAVION	6150110	PIPER J3	7100503	PIPER PA16	7101604
NAVIONNAVION	6150112	PIPER J3	7100504	PIPER PA17	7101702
NAVIONNAVION	6150114	PIPER J3	7100506	PIPER PA18	7101802
NAVIONNAVION	6150116	PIPER J3	7100508	PIPER PA18	7101804
NAVIONNAVION	6150118	PIPER J3	7100509	PIPER PA18	7101806
NAVIONNAVION	6150120	PIPER J3	7100510	PIPER PA18	7101808
NAVIONNAVION	6150122	PIPER J3	7100511	PIPER PA18	7101809
NAVIONNAVION	6150130	PIPER J3	7100512	PIPER PA18	7101810
NAVIONNAVION	6150132	PIPER J3	7100514	PIPER PA18	7101811
NAVIONNAVION	6150134	PIPER J3	7100516	PIPER PA18	7101812
NAVIONNAVION	6150136	PIPER J3	7100518	PIPER PA18	7101813
NAVIONNAVION	6150138	PIPER J3	7100519	PIPER PA18	7101814
NAVIONNAVION	6150140	PIPER J3	7100520	PIPER PA18	7101815
NAVIONNAVION	6150142	PIPER J3	7100520	PIPER PA18	7101816

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
PIPER PA18	7101818	PIPER PA25	7102508	PIPER PA31	71031CS
PIPER PA18	7101820	PIPER PA28	7102510	PIPER PA31	7103110
PIPER PA18	7101822	PIPER PA28	7102801	PIPER PA31	7103120
PIPER PA18	7101824	PIPER PA28	7102802	PIPER PA31T	7103124
PIPER PA18	7101826	PIPER PA28	7102803	PIPER PA31T	7103126
PIPER PA18	7101828	PIPER PA28	7102804	PIPER PA31T	7103127
PIPER PA18	7101830	PIPER PA28	7102805	PIPER PA31T	7103128
PIPER PA18	7101832	PIPER PA28	7102806	PIPER PA32	7103118
PIPER PA18	7101834	PIPER PA28	7102807	PIPER PA32	7103206
PIPER PA18	7101836	PIPER PA28	7102808	PIPER PA32	7103207
PIPER PA18	7101837	PIPER PA28	7102809	PIPER PA32	7103208
PIPER PA18	7101838	PIPER PA28	7102810	PIPER PA32	7103209
PIPER PA18	7101880	PIPER PA28	7102811	PIPER PA32	7103210
PIPER PA18	7101902	PIPER PA28	7102812	PIPER PA32	7103211
PIPER PA18	7101903	PIPER PA28	7102813	PIPER PA32	7103212
PIPER PA18	7101904	PIPER PA28	7102814	PIPER PA32	7103213
PIPER PA18	7101906	PIPER PA28	7102815	PIPER PA32	7103214
PIPER PA20	7102002	PIPER PA28	7102816	PIPER PA32	7103215
PIPER PA20	7102004	PIPER PA28	7102817	PIPER PA32	7103218
PIPER PA20	7102006	PIPER PA28	7102818	PIPER PA32	7103220
PIPER PA20	7102008	PIPER PA28	7102819	PIPER PA32	7103222
PIPER PA20	7102010	PIPER PA28	7102824	PIPER PA34	*PA34
PIPER PA20	7102012	PIPER PA28	7102830	PIPER PA34	7103404
PIPER PA20	7102018	PIPER PA28	7102510	PIPER PA34	7103405
PIPER PA22	7102202	PIPER PA28	7102801	PIPER PA34	7103406
PIPER PA22	7102203	PIPER PA28	7102802	PIPER PA34	7103407
PIPER PA22	7102204	PIPER PA28	7102803	PIPER PA34	7103408
PIPER PA22	7102206	PIPER PA28	7102E04	PIPER PA34	7103420
PIPER PA22	7102208	PIPER PA28	7102805	PIPER PA36	7103602
PIPER PA22	7102210	PIPER PA28	7102806	PIPER PA36	7103610
PIPER PA22	7102212	PIPER PA28	7102807	PIPER PA36	7103612
PIPER PA22	7102214	PIPER PA28	7102808	PIPER PA36	7103614
PIPER PA22	7102216	PIPER PA28	7102809	PIPER PA36	7103620
PIPER PA22	7102202	PIPER PA28	7102810	PIPER PA38	7103812
PIPER PA22	7102203	PIPER PA28	7102811	PIPER PA42	7104202
PIPER PA22	7102204	PIPER PA28	7102812	PIPER PA44	*PA44
PIPER PA22	7102206	PIPER PA28	7102813	PIPER PA44	7104402
PIPER PA22	7102208	PIPER PA28	7102814	PIPER PA44	7104404
PIPER PA22	7102210	PIPER PA28	7102815	PROPJT200	0140302
PIPER PA22	7102212	PIPER PA28	7102816	PROPJT200	0140304
PIPER PA22	7102214	PIPER PA28	7102817	PROPJT200	0140306
PIPER PA22	7102216	PIPER PA28	7102818	PROPJT200	0140308
PIPER PA23	*PA23	PIPER PA28	7102819	PROPJT200	0140312
PIPER PA23	7102302	PIPER PA28	7102824	PROPJT200	0140314
PIPER PA23	7102303	PIPER PA28	7102830	RAVEN RX8	7480502
PIPER PA23	7102304	PIPER PA30	*PA30	RAVEN S50	05604XT
PIPER PA23	7102305	PIPER PA30	7103002	RAVEN S50	05604XW
PIPER PA23	7102306	PIPER PA30	7103015	RAVEN S50	7480202
PIPER PA23	7102308	PIPER PA30	7103902	RAVEN S50	7480204
PIPER PA23	7102309	PIPER PA30	7104002	RAVEN S55	7480402
PIPER PA23	7102310	PIPER PA31	*PA31	RAVEN S80	0560477
PIPER PA24	7102402	PIPER PA31	7103102	RAVEN S80	7480604
PIPER PA24	7102403	PIPER PA31	7103103	RAVEN S80	7480606
PIPER PA24	7102404	PIPER PA31	7103104	RAVEN S80	7480610
PIPER PA24	7102406	PIPER PA31	7103105	RAVEN S86	7480612
PIPER PA24	7102407	PIPER PA31	7103110	RAVEN S86	7480615
PIPER PA24	7102408	PIPER PA31	7103120	RKWELL500	*500
PIPER PA24	7102409	PIPER PA31	*PA31	RKWELL500	7630410
PIPER PA25	7102502	PIPER PA31	7103102	RKWELLNA265	*NA265
PIPER PA25	7102503	PIPER PA31	7103103	RKWELLNA265	6402G02
PIPER PA25	7102504	PIPER PA31	7103104	RKWELLNA265	6402G04

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
RKWELLNA265	6402606	SCWZERSG1	8050114	SLINDS100	9550102
RKWELLNA265	6402608	SCWZERSG1	8050116	SLINDS100	9550104
RKWELLNA265	6402610	SCWZERSG1	8050118	SLINDS100	9550112
RKWELLNA265	6402612	SCWZERSG1	8050120	SMITH 600	1710602
RKWELLNA265	6402614	SCWZERSG1	8050122	SMITH 600	1710606
RKWELLNA265	6402618	SCWZERSG1	8050124	SMITH 600	8360602
RKWELLNA265	7360108	SCWZERSG1	8050146	SMITH 600	8360606
RKWELLNA265	7630101	SCWZERSG1	8050147	SMITH 600	8360802
RKWELLNA265	7630104	SCWZERSG1	8050148	SMITH 600	8360806
RKWELLNA265	7630106	SCWZERSG1	8050149	SNIAS 350	8680801
RKWELLNA265	7630107	SCWZERSG1	8050151	SNIAS 350	8680803
RKWELLNA265	7630108	SCWZERSG1	8050153	SNIAS 350	8680804
ROBSINR22	7640102	SCWZERSG1	8050501	SNIAS SA318	8680208
ROLSCHLS	3801206	SCWZERSG1	8050502	SNIAS SA318	8680506
ROLSCHLS	3801208	SCWZERSG1	8050504	SNIAS SA318	8680508
ROLSCHLS	3801211	SCWZERSG1	8050515	SNIAS SA318	8680511
ROLSCHLS	3801214	SCWZERSG1	8053604	SNIAS SA318	8680514
ROLSCHLS	3801250	SCWZERSG2	8050202	SNIAS SA318	8680516
RYAN ST3	7830502	SCWZERSG2	8050204	SNIAS SA341	8680610
RYAN ST3	7830504	SCWZERSG2	8050206	SOCATAMS894	8402842
RYAN ST3	7830506	SCWZERSG2	8050210	SOCATARALLYE	8400125
RYAN STA	7830402	SCWZERSG2	8050602	SOCATARALLYE	8400131
RYAN STA	7830404	SCWZERSG2	8050604	SPHRTHCIRRUS	38019VC
SCHLERASW12	3801508	SCWZERSG2	8050606	SPHRTHCIRRUS	38019VE
SCHLERASW15	38015H2	SCWZERSG2	8050608	SPHRTHNIMBUS	3801923
SCHLERASW15	38015HZ	SCWZERSG2	8050610	SPHRTHNIMBUS	3801925
SCHLERASW20	3801503	SCWZERSG2	8050612	SPHRTHNIMBUS	3801950
SCHLERASW20	3801505	SCWZERSG2	8050614	SPHRTHNIMBUS	38019VD
SCHLERASW20	3801506	SCWZERSG2	8051404	SPHRTHNIMBUS	38019VF
SCHLERK8	3801559	SCWZERSG2	8051604	SPHRTHNIMBUS	38019VG
SCHLERK8	3801563	SCWZERSG2	8051606	SPHRTHNIMBUS	38019VJ
SCHLERK8	3801567	SEMCO CLNGER	8070802	SPHRTHVENTUS	3802050
SCHLERK8	38019VK	SEMCO MODELT	8071701	SPHRTHVENTUS	3802051
SCHLERK8	38019VL	SKRSKY55	8141602	STBROSSD3	*SD3
SCHLERKA6	3801525	SKRSKY55	8141604	STBROSSD3	8100602
SCHLERKA6	3801528	SKRSKY55	8141606	STNSON10	8632002
SCHLERKA6	3801530	SKRSKY55	8141615	STNSON10	8632004
SCHLERKA6	3801533	SKRSKY55	814161E	STNSON10	8632102
SCHLERKA6	3801535	SKRSKY55	814161G	STNSON10	8632104
SCHLERKA6	3801536	SKRSKY55	814161J	STNSON10	8632106
SCHLERKA6	3801537	SKRSKY55	8141622	STNSONL5	8630202
SCHLERKA6	3801540	SKRSKY55	8141630	STNSONL5	8630204
SCHLERKA6	3801542	SKRSKY55	8141632	STNSONL5	8630206
SCHLERKA6	3801545	SKRSKY55	8141801	STNSONL5	8630208
SCHLERKA6	3801554	SKRSKY55	8141802	STNSONL5	8630210
SCWZERG164	3952702	SKRSKY55	8141804	STNSONL5	8630212
SCWZERG164	3952704	SKRSKY55	8141806	STNSONL5	8630214
SCWZERG164	3952802	SKRSKY55	8141808	STNSONSR9	8631502
SCWZERG164	3952803	SKRSKY55	8141809	STNSONSR9	8631504
SCWZERSG1	8050101	SKRSKY55	8141814	STNSONSR9	8631506
SCWZERSG1	8050102	SKRSKY55	8141815	STNSONSR9	8631508
SCWZERSG1	8050103	SKRSKY55	8141816	STNSONSR9	8631510
SCWZERSG1	8050104	SKRSKY55	8141831	STNSONSR9	8631512
SCWZERSG1	8050105	SKRSKY55	8141836	STNSONSR9	8631514
SCWZERSG1	8050108	SKRSKY78	8143006	STNSONSR9	8631516
SCWZERSG1	8050107	SKRSKY78	8143010	STNSONSR9	8631518
SCWZERSG1	8050108	SLINDS100	0140202	STNSONSR9	8631520
SCWZERSG1	8050110	SLINDS100	0140203	STNSONSR9	8631522
SCWZERSG1	8050111	SLINDS100	0140204	STNSONSR9	8631524
SCWZERSG1	8050112	SLINDS100	0140208	STNSONSR9	8631526
SCWZERSG1	8050113	SLINDS100	0140210	STNSONSR9	8631528

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
STNSONV77	8631802	TCRAFTBC	9230902	UNIVAR108	9230414
STNSONV77	8631804	TCRAFTBC	9230904	UNIVAR108	9230416
STOLAMRC3	3080202	TCRAFTBC	9230906	UNIVAR108	9230418
STOLAMRC3	3080203	TCRAFTBC	9230908	UNIVAR415	0420102
STOLAMRC3	3080204	TCRAFTBC	9230910	UNIVAR415	0420104
STOLAMRC3	3080206	TCRAFTBC	9230912	UNIVAR415	0420202
STOLAMRC3	5410102	TCRAFTBC	9230914	UNIVAR415	0420204
SUPAC LA	8730202	TCRAFTBC	9230916	UNIVAR415	0420302
SUPAC LA	8730204	TCRAFTBC	9230918	UNIVAR415	0420304
SUPAC LA	8730206	TCRAFTBC	9230920	UNIVAR415	0420306
SUPAC LA	8730208	TCRAFTBC	9230922	UNIVAR415	0420308
SUPAC V	8730302	TCRAFTBC	9230924	UNIVAR415	0420310
SUPAC V	8730304	TCRAFTBC	9230926	UNIVAR415	0420312
SUPAC V	8730306	TCRAFTBC	9230928	UNIVAR415	0420314
SUPAC V	8730308	TCRAFTBF	8850326	UNIVAR415	0420316
SWRNGNSA226	*SA226	TCRAFTBF	8850330	UNIVAR415	0420318
SWRNGNSA226	8780122	TCRAFTBF	8850332	UNIVAR415	0420320
SWRNGNSA226	8780402	TCRAFTBF	8850334	UNIVAR415	0420322
SWRNGNSA226	8780404	TCRAFTBF	8850336	UNIVAR415	0420324
SWRNGNSA226	8780405	TCRAFTBF	8850338	UNIVAR415	0420326
SWRNGNSA226	8780406	TCRAFTBF	8850340	UNIVAR415	0420328
SWRNGNSA226	*SA226	TCRAFTBF	8850344	UNIVAR415	0420330
SWRNGNSA226	8780122	TCRAFTBL	8850346	UNIVAR415	0420332
SWRNGNSA226	8780402	TCRAFTBL	8850348	UNIVAR415	0420334
SWRNGNSA226	8780404	TCRAFTBL	8850350	UNIVAR415	0420336
SWRNGNSA226	8780405	TCRAFTBL	8850354	UNIVAR415	0420338
SWRNGNSA226	8780406	TCRAFTBL	8850356	UNIVAR415	0420340
SWRNGNSA227	8780603	TEMCO 11A	8890402	UNIVAR415	0420402
SWRNGNSA227	8780610	TEMCO 11A	8890404	UNIVAR415	0420404
SWRNGNSA227	8780615	THUNDRAZ7	8970105	UNIVAR415	0420406
SWRNGNSA227	8780620	THUNDRAZ7	8970106	UNIVAR415	0420408
SWRNGNSA26	*SA26	THUNDRAZ7	8970107	UNIVAR415	0420410
SWRNGNSA26	8780102	THUNDRAZ7	8970108	UNIVAR415	0420502
SWRNGNSA26	8780112	THUNDRAZ7	8970110	UNIVAR415	0420504
TCRAFKD	8850402	THUNDRAZ7	8970120	UNIVAR415	0420702
TCRAFKD	8850404	TRYTEK85	0190406	UNIVAR415	0420722
TCRAFKD	8850406	TRYTEK85	0190712	UNIVAR415	0540102
TCRAFKD	8850408	TRYTEK85	0190714	UNIVAR415	0540104
TCRAFKD	8850410	TRYTEK85	0190716	UNIVAR415	5872014
TCRAFKD	8850412	TRYTEK85	0190718	UNIVAR415	5872018
TCRAFKD	8850414	TRYTEK85	0190920	VARGA 2150	5940202
TCRAFKD	8850415	TRYTEK85	0190922	VARGA 2150	5940204
TCRAFKD	8850416	TRYTEK85	0190924	VARGA G21	9350102
TCRAFKD	8850418	TRYTEK85	0190926	VICKER745	9470204
TCRAFKD	8850420	TRYTEK85	0190928	VICKER745	9470402
TCRAFKD	8850422	TRYTEK85	0190930	VICKER745	9470404
TCRAFKD	8850448	TRYTEK85	0190932	VICKER745	9470602
TCRAFTA	8850202	TRYTEK85	0190934	WACO ASO	9601202
TCRAFTBC	8850302	TRYTEKK	0190402	WACO GXE	9600702
TCRAFTBC	8850304	TRYTEKK	0190404	WACO R	9600304
TCRAFTBC	8850306	UNIVACGC1	9230102	WACO R	9600422
TCRAFTBC	8850308	UNIVACGC1	9230104	WACO UPF7	9601302
TCRAFTBC	8850310	UNIVACGC1	9230106	WACO UPF7	9601304
TCRAFTBC	8850314	UNIVACGC1	9230108	WACO YK	9600816
TCRAFTBC	8850316	UNIVACGC1	9230110	WACO YK	9600818
TCRAFTBC	8850318	UNIVACGC1	9230112	WACO YK	9600832
TCRAFTBC	8850320	UNIVAR108	9230402	WACO YK	9600834
TCRAFTBC	8850321	UNIVAR108	9230404	WACO YK	9600835
TCRAFTBC	8850322	UNIVAR108	9230406	WACO YK	9600836
TCRAFTBC	8850323	UNIVAR108	9230408	WACO YK	9600838
TCRAFTBC	8850324	UNIVAR108	9230412	WACO YK	9600840
				WSK M18	9810102
				WTHRLY201	9630404
				WTHRLY201	9630406
				WTHRLY201	9630408
				WTHRLY201	9630410

APPENDIX E

SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) ENGINE GROUP NAMES AND THE FAA ENGINE MANUFACTURER/MODEL (MM) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MM CODES FOR ENGINES OF SIMILAR DESIGN INTO GROUPS FOR ANALYTICAL PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN THE ENGINE STATISTICS TABLE IN THE BODY OF THIS REPORT.

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA
ALLSN 250C	03002	GE	CF700	30010	*AVON
ALLSN 250C	03011	GE	CJ610	*CJ61	*BAST
ALLSN 250C	03013	GE	CJ610	30002	*CF6
ALLSN 501D	*501D	GE	CJ610	30006	*CJ80
ALLSN 501D	03004	GE	CJ805	*CJ80	00585
ALLSN 501D	03005	GE	CJ805	30004	01505
ALLSN 501D	03006	GE	CT58	*CT58	03003
AMTRMCMCCULH	42501	GE	CT58	30001	03010
AMTRVWVOLKS	63501	GE	CT58	30008	03012
ARSRCHTFE731	*TFE7	GLADENK5	37503	OTHER	04501
ARSRCHTFE731	01518	GLADENR5	37504	OTHER	13802
ARSRCHTPE331	*TPE3	JACOBPR755	35006	OTHER	17013
ARSRCHTPE331	01502	JACOBPR755	35007	OTHER	17030
ARSRCHTPE331	01506	JACOBPR755	35008	OTHER	17033
ARSRCHTPE331	01508	JACOBSSR755	35003	OTHER	20003
ARSRCHTPE331	01510	JACOBSSR915	35005	OTHER	26002
ARSRCHTPE331	01512	LYC	0540	41532	27005
CONT 6285	17038	LYC	LTS101	41560	27011
CONT 975	17037	LYC	0145	41501	27026
CONT A40	17001	LYC	0145	41502	27033
CONT A50	17002	LYC	0145	41503	27033
CONT A65	17003	LYC	0235	41505	27036
CONT A75	17005	LYC	0290	41506	30005
CONT A80	17006	LYC	0320	41500	30020
CONT C125	17011	LYC	0320	41508	31701
CONT C145	17012	LYC	0320	41509	37002
CONT C35	17008	LYC	0340	41510	41549
CONT C90	17009	LYC	0360	41511	41555
CONT E185	17014	LYC	0360	41513	51001
CONT E225	17015	LYC	0360	41514	52001
CONT 0200	17020	LYC	0360	41515	52047
CONT 0300	17022	LYC	0360	41522	52053
CONT 0300	17024	LYC	0360	41524	54501
CONT 0360	17023	LYC	0435	*0435	54510
CONT 0360	17025	LYC	0435	41516	54517
CONT 0360	17033	LYC	0435	41517	60002
CONT 0470	*0470	LYC	0435	41518	60004
CONT 0470	17026	LYC	0435	41519	60005
CONT 0470	17027	LYC	0435	41520	60005
CONT 0470	17028	LYC	0435	41521	60008
CONT 0470	17029	LYC	0435	41523	60009
CONT 0520	*0520	LYC	0435	41525	60012
CONT 0520	17032	LYC	0435	41526	60014
CONT 0520	17035	LYC	0480	41527	60020
CONT 0520	17040	LYC	0480	41529	60030
CONT R670	17016	LYC	0540	*0540	60030
CONT R670	17018	LYC	0540	41355	99999
DHAVXXGIPSY	20004	LYC	0540	41530	OTHER
FCD 8440	25003	LYC	0540	41531	PCKARDV1650
FRNKLIN4AC150	27002	LYC	0540	41532	49001
FRNKLIN4AC150	27003	LYC	0540	41533	PWA JT12
FRNKLIN4AC150	27004	LYC	0540	41534	*JT12
FRNKLIN4AC176	27005	LYC	0540	41534	52042
FRNKLIN4AC176	27007	LYC	0540	41535	PWA JT15
FRNKLIN4AC199	27008	LYC	0540	41538	52060
FRNKLIN4AC199	27009	LYC	0541	41536	PWA JT15
FRNKLIN4AC199	27010	LYC	0541	41539	52112
FRNKLINBA4150	27024	LYC	0720	41546	PWA JT3C
FRNKLINBA4165	27025	LYC	R680	41540	*JT3C
FRNKLINBA4200	27027	LYC	R680	41541	PWA JT3C
FRNKLINBA8215	27030	LYC	R680	41542	52036
FRNKLINBAV335	27020	LYC	R680	41543	PWA JT3D
FRNKLINBAV350	27043	LYC	R680	41544	*JT3D
FRNKLINBVS335	27040	LYC	R680	41545	PWA JT3D
FRNKLINB3356	27033	LYC	T53	41552	52039
GE CF700	*CF70	MNASCO4	43504	PWA JT4	52048
		ONAN B48	99999	PWA JT8	52049
				PWA JT8	52051
				PWA JT9	*JT9

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
PWA JT9	02050	RROYCEDART	*DART	WRIGHTR1820	*R182
PWA JT9	52050	RROYCEDART	54503	WRIGHTR1820	67018
PWA PT6	*PT6	RROYCEDART	54504	WRIGHTR1820	67019
PWA PT6	52043	RROYCEDART	54505	WRIGHTR1820	67021
PWA PT6	52403	RROYCEDART	54506	WRIGHTR1820	67024
PWA PT6	61501	RROYCEDART	54507	WRIGHTR1820	67025
PWA PT6	61503	RROYCEDART	54508	WRIGHTR1820	67026
PWA PT6	61504	RROYCEDART	54509	WRIGHTR1820	67027
PWA PTE	61506	RROYCEDART	54522	WRIGHTR1820	67028
PWA PT6T	52045	RROYCEDART	54553	WRIGHTR1820	67029
PWA PTGT	61502	RROYCEGIPSY	20005	WRIGHTR2600	67030
PWA R1340	*R134	RROYCEGIPSY	20006	WRIGHTR2600	67031
PWA R1340	52009	RROYCEGIPSY	20007	WRIGHTR2600	67050
PWA R1340	52010	RROYCEGIPSY	20008	WRIGHTR3350	*R335
PWA R1340	52011	RROYCERB211	*RB21	WRIGHTR3350	67032
PWA R1340	52012	RROYCERB211	44554	WRIGHTR3350	67033
PWA R1340	52016	RROYCERB211	54554	WRIGHTR3350	67034
PWA R1830	*R183	RROYCESPEY	*SPEY	WRIGHTR3350	67037
PWA R1830	52017	RROYCESPEY	54519	WRIGHTR3350	67038
PWA R1830	52018	RROYCESPEY	54521	WRIGHTR760	67009
PWA R1830	52019	RROYCESPEY	54523	WRIGHTR760	67010
PWA R1830	52020	RROYCEVIPER	*VIPE	WRIGHTR760	67011
PWA R2000	*R200	RROYCEVIPER	10201	WRIGHTR975	67012
PWA R2000	52021	RROYCEVIPER	54550	WRIGHTR975	67015
PWA R2000	52023	RROYCEVIPER	54552		
PWA R2800	*R280	TMECA ARTST3	60003		
PWA R2800	52024	TMECA AST14T	60014		
PWA R2800	52025	TMECA AST2T	60006		
PWA R2800	52026	TMECA AST3T	60007		
PWA R985	*R985	WARNER165	64504		
PWA R985	52006	WARNER185	64505		
PWA R985	52007	WARNER50	64503		
PWA R985	52008	WRIGHTJ5	67007		

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